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The Thoresty Society:



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## BOOK OF THE DAY.

## The Woollen Industry in Leeds.

By Professor J. H. Clapham.

The Leeds Woollen Industry, 1780-1820. Edited for the Thoresby Society by W. B. Crump,

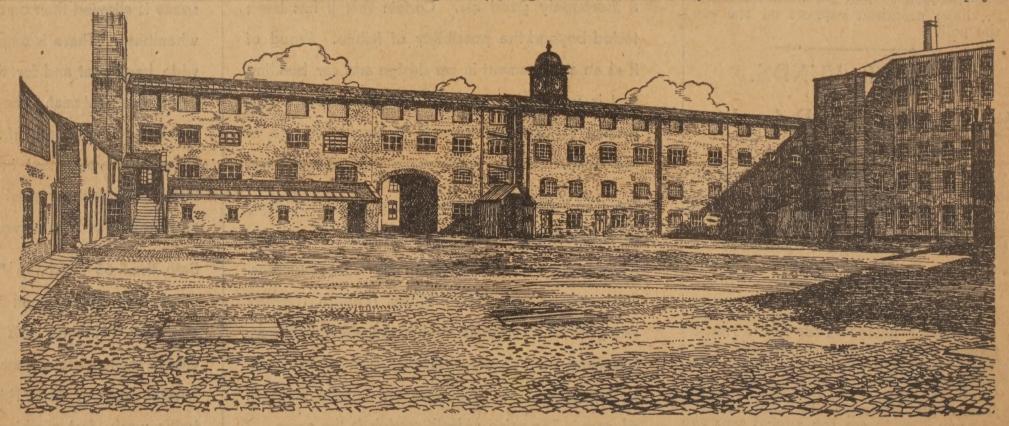
To Yorkshiremen and all historians this should be an absorbing volume. For some years now, in England and America, there has been a movement for the rewriting of modern social and economic history from business records. The records are perishable and have too often been lost. hardly hoped for so rich a find as this well-edited collection of Leeds woollen documents. With its help you can walk right into the business world of the Industrial Revolution and the Napoleonic wars.

The papers of Benjamin Gott and of his firm, now in the Leeds University Library, extracts from which (selected by the librarian, Dr. Offor) form the core of the volume, are fragmentary; but, helped by the Bean Ing Mill Note Book—a unique document-and the account of Gott's deal-

way in the years 1793-1815-to all the markets of the world.

Besides the Gott papers there is the fascinating diary of Jos. Rogerson, scribbling miller of Bramley, 1808-1814, edited by Miss Hargrave and Mr. Crump. As the editors rightly say, the two sets of documents are complementary. Gott is the "merchant manufacturer," looked on askance by many of the clothiers. He towers above them and above other factory owners. Rogerson is in quite a different pair of shoes. He is working for the clothiers on commission. He willeys and scribbles their wool for them by power, passes it on to slubbers who work for him, and returns it to its owner as slubbings. He is one of themselves—a bit of a farmer like them; almost as much interested in the weather as in the wool. "December 8, 1808.—Wild weather but droughty. We are slack of fine work in the mill. Switching and Ditching low (h) Edge in Mill Close."

us the history of the documents, which have only come into the hands of the Thoresby Society and the University during the last six years. He is right to stress the fact that the huge majority of Gott's 761 people were not factory operatives in our modern sense, but hand-workers collected into one imposing set of buildings. Weaving, burling, cropping, dyeing, were all done at Gott's in the old way. There were a couple of mules, but there was no power laid on to the room where they were. Spinning was mostly done on the jinny (down to 1829). Between the jinny and the carding engines came the "billy"—a kind of coarser jinny—which prepared the slubbings. It also was hand-driven. Slubbers, both at Gott's and Rogerson's, were well paid, rather masterful handi-craftsmen, who realised their own importance. They controlled the bottle-neck, even when power-driven mules came in, as Ure noted in his "Philosophy of



Bean Ing Mill, founded by Benjamin Gott, in Wellington Street, Leeds, was one of the first, if not the first, of the woollen mills in this place. The documents relating to its history, published by the Thoresby Society, are dealt with in the accompanying review.

ings with Messrs, Boulton and Watt furnished by Professor Heaton, they are enough to bring before us one of the greatest English business concerns of that day with extraordinary vividness. I doubt if any single surviving record of the period is quite so illuminating to the economic historian as two pages from the Note Book, one of which estimates the year's profit at Bean Ing for 1815 and the other tabulates the people employed there (761 all told) in 1813 with their exact jobs. Indeed, the whole of the Note Book, edited by Mr. Yewdall, is of extraordinary interest—some of it to the economist, the rest to the textile expert. One can follow the wool right through the factory and, with the aid of the indefatigable Mr. Hopps' letter to Gott, one can follow the cloth and the Gott, one can follow the cloth and the lankets on their way—it was a difficult pulls all the material together and gives

That is the sort of thing. There is more social history in Rogerson than in the Gott papers. Rogerson was a volunteer, and we learn how he trained. He jots down news of the wars. He is interested in the organ at Bramley chapel, and he notes when the Methodists begin to christen children and to bury in their own ground. But all the background is industrial. When we have leaded at the Leville was trial. trial. When we have looked at the Leeds workers' industry through the eyes both of Rogerson and of Gott's people we have seen most of it. The background is filled in by the admirable selection of trade notices and advertisements made by Miss Hargrave and Mr. Crump from "The Leeds Mercury" and "The Leeds Intelligencer" Intelligencer.

Manufacture " in 1835. It was only the adoption of the modern condensing process, at a much later date, which cut out both billy and slubber. There was really no more "power" in Gott's methods at this time than in those of Rogerson and his clothier customers.

Of course Gott used a fine steam engine, and many of them, when they clubbed togather to start "company" scribbling mills, used water. Yet not all. This reviewer's great-grandfather was one of a group of clothiers who founded "the steam mill" at Birstall about the year 1802. The reviewer had never hoped to get so accurate and vivid a picture of that get so accurate and vivid a picture of that great-grandfather's Yorkshire as the Thoresby Society, the editors, and those whose public spirit has given us these papers, have now unrolled for him. The Leeds Woollen Industry 1780-1820. Edited by W. B. Crump, M. A. Published by The Thoresby Society, Leeds, Eng. Clothbound, over 300 pages, illustrated.

This highly interesting volume presents a number of historical documents which combine to give a clear picture of Leeds woolen industry during the years 1780-1820. The volume had its origin in the gift to the Thoresby Society of the books wherein Joseph Rogerson, a scribbling miller of Brambley, wrote his "Memorandums". These, together with "The Papers of Benjamin Gott", "The Bean Ing Mill Note Book", "The Pattern Book of William Gott", and Trade Notices, Newspaper Advertisements and Extracts form the basis and historical background. Around it the author has written a general introduction giving a complete outline of the Leeds Woolen Industry during those years of transformation between 1780-1820, and in Chapter IV the History of Gott's Mills. The volume also shows a number of very interesting pictures of old equipment etc.

MELLIAND TEXTILE MONTHLY JUNE 1931

The Leeds Woollen Industry, 1780–1820. Edited by W. B. CRUMP. 1931. xi + 343 pp. Leeds, Thoresby Society, Vol. XXXII. 16s.

This book recalls a delightful Yorkshire, in which—during the whole period—spinning and weaving were still done by hand; when the introduction (in 1792) of a 40 horse-power engine—and that only for some processes at the very beginning and the end of the manufacture of cloth, such as scribbling, carding, and fulling-was a daring innovation; when even gasometers were no disfigurement, for it was erroneously supposed that they required to be placed inside picturesque gasholders for protection; when the words "merchant" and "manufacturer" were connected by a hyphen; when "farmer" and "millowner" might almost have been also joined, for a master-scribbler was torn between his desire for a moist "growing" day for his crops and a "droughty" day which would let him dry his wool out of doors. We catch glimpses of woollen trade in war-time: go-betweens "fattening" on army blankets at the expense of the manufacturer; Spanish wool expected to be 2s. or 3s. higher on "Bonoparte having got possession of Spain again "; a parallel to Charlotte Brontë's description of the jubilation when the Orders in Council were repealed in Rogerson's remark under 28 June, 1812, "'Tis said by the Clothiers that there has been more Cloth sold to day than ever they saw sold in Leeds Cloth Hall in one day in their lives." We get a few lights—not many—on Luddite riots and labour disputes. When the mill was "throng," and hands "scarce," in 1814, their illiterate master Rogerson records that they were "has saucy has Newgate" or "the Devil"—"I scarce can tell yet wether this good trade is to do me hurt or good owing to this reason." There are curious sidelights on several things besides economics,—for instance, the duties and expenses of a militia officer, parish and highway administration, and church matters. The first time Rogerson heard a clergyman of the establishment give out a hymn from the reading desk was in 1813,—hence the superior popularity of the chapel.

Mr. Crump calls the book both a history and a quarry. It is more valuable in the latter aspect. Part of it is a republication of Rogerson's interesting diary; most of the remainder consists of the Gott papers, with explanatory articles. But we do not get a clear connected history from 1780 to 1820 of the premier woollen firm of Leeds,—and, indeed, of the kingdom. There were two occasions when Gott's name came prominently before the world: the first in 1800, when he gave evidence before the Wool Committee on the interesting subject of the effect of machinery in reducing the demand for labour; the second in 1816, when Owen asserted before another Committee that he had admitted working a sixteen-hour day in 1815. The first point is left rather obscure in this book, the second is not touched at all, which is

disappointing.

On the other hand, Mr. Crump's introductory account of the Leeds Woollen Industry is most valuable. This, with the aid of the admirable index, enables us to solve every difficulty at a glance. We are henceforward left without excuse if we do not know the difference between billy and willy, kersey and kerseymere, moser and mozer, though one sentence which Mr. Crump unkindly throws to "the ordinary reader to puzzle out for himself," namely "the Piece is then thrown in cuttle on a Horse tree to sipe," produces (till we try the index) the same exasperation to which Dr. Johnson owned when he was told of a certain ship's cabin that it was "where the lop-lolly man kept his lop-lolly."

isms; and there are large sections of which it takes the stout heart of a reviewer to read every word. As some counterpoise to this, there are interesting plans and illustrations,—in particular, two charming prints from Walker's Costume of Yorkshire. Altogether this is a book which should prove of value as a work of reference to those interested in the industrial revolution, and of great interest to the folk of Leeds, and to all those engaged in the woollen trade who like to know—as all should—how their business used to be conducted in the past.

A. F. Fremantle.

The Restoration and the July Monarchy. By J. Lucas-Dubreton. 1929. v + 381 pp. The Second Republic and Napoleon III. By Riné Arnaud. 1930. vii + 436 pp. Both trans. by E. F. Buckley. Heinemann. 12s. 6d. each.

IT was a happy idea that that brilliant series L'Histoire de France Racontée à Tous should be translated into English, though its new general title, The National History of France, is hardly recognisable. M. Funck-Brentano's "Middle Ages" and M. Madelin's "Revolution" almost at once acquired the position of classics, and M. Lucas-Dubreton's volume on the Restoration period is a very successful continuation of their method, which is to encourage the leading characters so far as possible to speak for themselves. Excellent little bibliographies are appended to each chapter, thus saving the necessity of footnotes in a work of this popular scope: while Mr. Buckley has produced an eminently readable translation of a very well written book. M. Lucas-Dubreton may be said to have taken as his text the saying of a Liberal newspaper of those days, 'Our age will be very difficult to explain to our grandchildren' (p. 109). But he paints a very vivid and convincing picture of the skill and moderation of Louis XVIII—so much less mediocre than he seemed at first sight, and especially as contrasted with the incorrigibly superficial and reactionary Charles X, who "would rather chop wood than reign after the fashion of the King of England." His considered verdict of the Restoration (pp. 172-3) goes perhaps farther than most writers on the period; but he is able to quote the view of Thiers that Louis was "the best of the constitutional kings of France,"-some would argue, a left-handed and highly restricted compliment. Specially interesting are his chapters on society both before and after 1830, and on the literary and political ideas of the whole period, and there are a series of vivacious word pictures of such men as Thiers, Carrel, Berryer, Périer or Lacordaire. On the other hand, his account of French foreign policy is often perfunctory, notably as regards the Greek war of revolution. He gives a very fair and sympathetic estimate of Louis Philippe, but perhaps hardly allows sufficiently for the bearing of foreign policy upon his final decline. The translation is accurate, but on p. 305 Henry (not yet even Sir) Bulwer is referred to as "Lord Bulwer," and it is not clear why the Grand Duke Constantine should be referred to as "a relative of the Tsar," when he was actually his elder brother, who had refused the crown on a famous occasion.

M. Arnaud's book on the Second Empire is perhaps less authoritative, but it provides in readable form a survey of the whole period, such as is hardly available elsewhere in English. In its main lines it admittedly follows M. de la Gorce's monumental work, but is written from a distinctly more radical angle, sometimes with a certain note of

# Publications

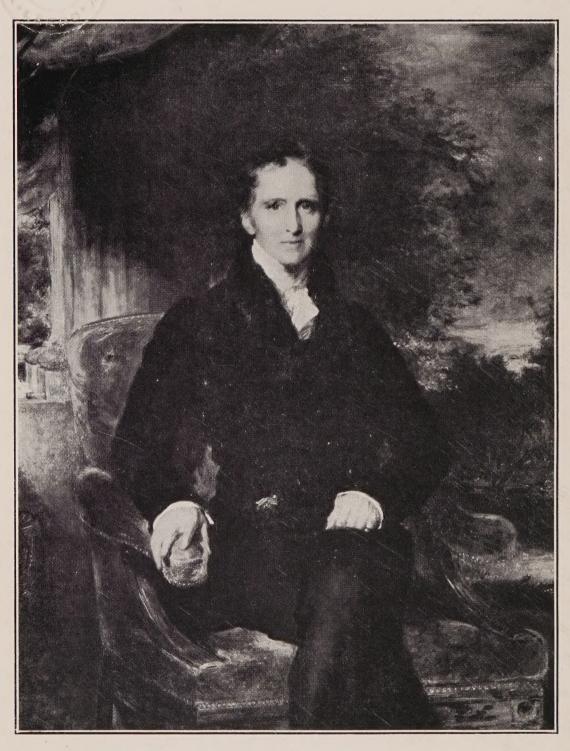
OF THE

# Thoresby Society

VOLUME XXXII
FOR THE YEAR 1929



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BENJAMIN GOTT After Sir Thomas Lawrence

# THE LEEDS WOOLLEN INDUSTRY

1780-1820

W. B. CRUMP, M.A.

THE THORESBY SOCIETY

16 QUEEN SQUARE, LEEDS

1931

MADE AND PRINTED IN GREAT BRITAIN

BY JOHN WHITEHEAD & SON LTD.,

ALFRED STREET, BOAR LANE, LEEDS.

#### PREFACE

THIS volume had its origin in the gift to the Thoresby Society of the books wherein Joseph Rogerson, a scribbling miller of Bramley, wrote his 'Memorandums,' which Miss Hargrave began to transcribe early in 1929 with a view to their publication in the next Miscellanea. taneously Dr. Offor proposed to select from the Gott Papers recently presented to the University Library some letters that might form the basis of another contribution. It was known to us that Professor H. Heaton, of the University of Minnesota, U.S.A., was preparing a second volume on the Yorkshire wool textile industry, to include the Industrial Revolution, and that he intended to make use of the Gott Papers and had, in fact, copied or asked for copies of many of them. It was therefore necessary to ascertain what reservations, if any, he wished to place upon the use of this material. It seemed to me that the Society would be materially assisting him by publishing a much larger selection from these Papers than was at first contemplated, for the documents related wholly to the Leeds industry and were too numerous and lengthy to be given in full in a volume on the Yorkshire industry.

In answer to my enquiry Professor Heaton gave a ready assent and left us with a free choice from the Gott Papers of whatever we thought suitable for our purpose, which did not aim at going beyond 1815 or thereabouts. He went further than this: stating what he thought would be the most interesting or valuable documents, and advising us to supplement them by relevant letters from the Boulton & Watt Collection in the Birmingham Reference Library. He offered assistance and sent forthwith a short contribution, based wholly on the Birmingham material.

With this cordial and helpful send-off it seemed likely that the available documents would throw enough light upon viii PREFACE

Personally, I am particularly indebted to Dr. Offor for his continued interest in the work and for much friendly discussion and criticism. In addition, he has placed at my service the resources of the University Library, and it was outside his own office that I had the good fortune to make the acquaintance of Rees' Cyclopædia. Mr. F. Beckwith and Mr. G. Woledge, of the Library staff, have also given considerable help in preparing the Gott Papers. Through Dr. Offor I have also been able to consult with specialists in one or another department of the University, and in this way Mr. Yewdall was induced to examine the Bean Ing Note-book. Professor A. F. Barker also, from the time that he was introduced to Rogerson's Diary, has continued to show a kindly interest in the progress of this history, whilst Mr. Yewdall's technical and local knowledge of the industry has been most freely placed at my disposal.

W.B.C.

Leeds, December, 1930.

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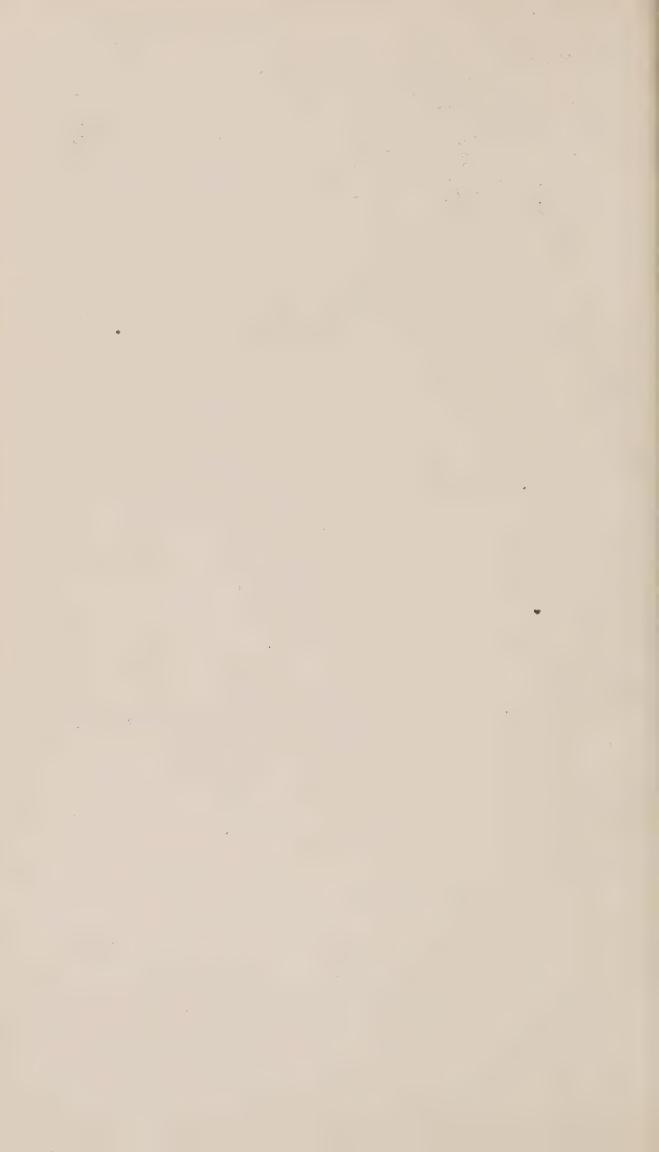
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THE GOTT FAMILY . .



## The Leeds Woollen Industry, 1780-1820

#### GENERAL INTRODUCTION

By W. B. CRUMP, M.A.

An industrial city ought to take pride in the history of its industries, but it is probably true that Leeds, the home of many industries, has shown much less interest in the rise and expansion of its earliest one, the woollen industry, than have Birmingham and Manchester or the towns of Lancashire in theirs. If it were not that Professor Herbert Heaton, now of the University of Minnesota, U.S.A., began a lifelong study of the textile industry in Yorkshire when he was at the University of Leeds twenty years ago, little would be known of the part played by Leeds beyond what may be gleaned from Defoe's picture of its cloth market in Briggate, or the meagre description in a Directory or local History. His Yorkshire Woollen and Worsted Industries, published in 1920, is a thorough and able survey "from the Earliest Times up to the Industrial Revolution," for Professor Heaton drew upon many unpublished and unused documents in Leeds (and elsewhere) as well as the local records published by the Thoresby Society and the Yorkshire Archæological Society. To take one illustration, he explored the collection of commercial papers, letters, minute books and account books relating to the Leeds White Cloth Hall, and this research was the foundation of his history of the "Leeds White Cloth Hall," written for the Thoresby Society and published in Vol. XXII (1913).

This kind of material, the raw stuff for economic and industrial history, because of its great bulk and its apparent uselessness, is liable to be destroyed every time a business changes hands or a partner dies. Even if it survives it is buried away and its existence is unknown. Occasionally some flotsam is thrown up by a domestic upheaval, or a few stray books and letters from its early days are preserved by a business firm that takes pride in its origin. It is useless to lament over what has been destroyed; but it cannot be too strongly urged that what remains should be preserved.

The Thoresby Society, the University Library, the Public Library, are all anxious to secure documents that will contribute to a fuller knowledge of Leeds industries. However insignificant the material seems to be it may, if old, be of considerable value to those who can use it. Nor is this all. Obsolete implements and machines, the hand-loom and all the tools used in the textile industry have been broken up or sold to the broker. The City Museum contains scarcely a relic of the old domestic industry, let alone specimens of 'gig-mill' or 'shearing-frame.' Golden opportunities have been missed, and therefore the greater the need to search for anything that still survives. Pride in a local industry can be fostered and justified only if its history is known and its evolution revealed by exhibits.

The documents printed below are precisely of this nature and are solid contributions to our knowledge of the woollen industry at the dawn of the nineteenth century, i.e., at a period when mechanical inventions applied to the industry were transforming it from a domestic stage to a factory stage, were replacing waterpower by steam and hand-labour by machinery. With their aid its development within a generation can be traced with a detail and an exactitude otherwise impossible. It is true that various Parliamentary enquiries within this period, especially the Report<sup>1</sup> of 1806, on the State of the Woollen Manufacture, throw much light on the prevailing industrial conditions and the changes in progress. But a Parliamentary enquiry is by its nature more concerned with the pathological aspect; it is probing the body politic in search of some disease, in hopes of prescribing a remedy. These documents, on the other hand, show the worker, engaged in the trade, pursuing his activities day by day; and the activities of one of them—Benjamin Gott—were the most important factor in the transformation and expansion of the Leeds industry during many critical years.

There are two sets of documents. The one consists solely of the private Diary of Joseph Rogerson, a fulling and scribbling miller of Bramley, and extends only from 1808 to 1814. This was given to the Thoresby Society by his great-niece, Miss Lucy Hudson, as recently as 1928. The other is composed of the multifarious papers and note-books relating to Benjamin Gott. They begin with his articles of apprenticeship to Wormald & Fountaine, Woollen Merchants of Leeds, in 1780, and his admission to the firm

<sup>&</sup>lt;sup>1</sup> Report from the Select Committee on the State of the Woollen Manufacture of England, 1806.

five years later, when it became Wormald, Fountaine & Gott. The bulk of the papers, as printed here, fall within the eighteenth century and consist mainly of letters addressed to the firm or to Gott, and relate largely to the equipment of the great wonderfactory at Bean Ing. The Hopps series, written from the counting-house, continue the story of the firm, on its commercial side, intermittently down to 1812. The dissolution of partnership early in 1817, when the firm took the title of Benj. Gott & Sons, marks the end of this period. All these papers and others of later date were presented to the University of Leeds within the last few years by Mrs. Frank Gott, a great grand-daughter of Benjamin Gott. To these must be added a technical note-book on Prices and Processes, written about 1810–15. This remained at Bean Ing for a century or more in the hands of successive firms until in 1925 the late Alexander B. Hunter saw its value and gave it to the University.

It is remarkable how all these documents have come to light, or at least passed into the care of public institutions, within the last few years, and how complementary the one set is to the other. Both virtually end with the downfall of Napoleon and the battle of Waterloo. The murmurs of the War and the restrictions on export trade, brought about by it and the American Non-intercourse Act, form an undertone in both Diary and commercial correspondence. Gott, by planting his new factory in the fields on the banks of the Aire, began the expansion of Leeds westwards, and forced the making of Wellington-street and Wellington Bridge immediately after Waterloo. Rogerson and a dozen others who erected new scribbling mills in Bramley, Farnley, Stanningley, Pudsey, and thereabouts, set the domestic clothiers migrating from Leeds into these villages, where a clothier could still farm a little land and be near the mill which did work for him.

#### MILL AND FACTORY.

The greatest service of Rogerson's Diary in this connection is the light it throws upon a part of Gott's business that only receives scant notice in the mass of his extant correspondence, though it is more prominent in the note-book on Prices and Processes. The fact is, though it may easily be overlooked, that Gott was a fulling and scribbling miller just as Rogerson was. The great engine supplied by Boulton & Watt was installed at Bean Ing to drive scribbling and carding machines and to lift fulling stocks. More-

over, it was used for very little else beyond grinding the dyewoods.<sup>1</sup> All other stages of manufacture were carried out by hand.

In what respect, then, did the mill, represented by Rogerson's scribbling mill, differ from the factory, represented by Bean Ing? There was in the minds of those engaged in the industry a very sharp distinction between them. Both were new developments almost contemporary in date; yet the one was speedily accepted with scarcely any opposition, and the other aroused strong hostility. The difference was not, primarily, one of magnitude. The essential distinction was that the scribbling mills were public mills entirely at the service of the clothiers, or cloth makers, whereas the factories were working upon material that belonged to their owners. Further, a factory was more than a fulling and scribbling mill, for the remaining stages of manufacture had been brought under the same roof and management and upon an unprecedented scale, even though for the time being machinery and power had not been applied to these processes. The domestic clothier, who had always been accustomed to carry his cloth to a neighbouring water-mill to be 'milled,' speedily adapted himself to the new order when these same mills equipped themselves with machines for scribbling and carding wool, processes which he had done by hand in his home under very disadvantageous conditions. Nor did the introduction of the steam-engine, in place of the water-wheel, disturb him at all. But the organisation of the factory excluded him entirely. was faced with a new competitor producing on a vast scale.

The Report of 1806, describing the merits of both systems—the old and the new—recognised that the scribbling mill was in reality part and parcel of the domestic system. "Various processes ....the chief of which were formerly done by hand under the Manufacturer's own Roof, are now done by Machinery in Public Mills, as they are called, which work for hire. There are several such mills near every manufacturing Village" (p. 9). "A young man....can always obtain credit for as much wool as will enable him to set up as a little Master Manufacturer, and the Public Mills....enable him to command the use of very expensive and complicated machines" (p. 10). But the Committee failed to realise the menace of the factory.

Its origin, in time and place, was stated with some degree of precision in the *Report*. "Several Factories...had long been established near Halifax and Huddersfield, but the principal pro-

gress of the Factory system, and that which chiefly created the alarm, is stated to have been, within about the last 14 years, in the town and neighbourhood of Leeds" (p. 11). This statement appears to be based upon the evidence of Robert Cookson, a master clothier of Holbeck, who named four or five factories within his knowledge, viz.: Mr. Fisher's, Mr. Brook's, Mr. Gott's (two), and Mr. Leven's. To this he added that it was "about 14 years since Mr. Fisher's factory set up." The first two names can be identified with the firms of Fisher & Nixon of Holbeck, and John and Edward Brooke of Hunslet-lane, both to be found in the list of merchants who signed the manifesto of 1791. Gott's two factories were Bean Ing and Armley Mills, and it would appear that Fisher and Nixon started a factory in Holbeck in the same year (1792) as Wormald, Fountaine & Gott erected theirs at Bean Ing.

Armley Mill, as far as the evidence goes, was not a factory but

Armley Mill, as far as the evidence goes, was not a factory but a scribbling mill, and to some extent a public mill. The Mills had been put up for sale in 1788, and were then described<sup>2</sup> as those "Ancient and well-accustomed Fulling Mills, Scribbling Mills, and Corn Mills called Armley Mills or Burley Mills."

They were evidently driven by water power and used for a variety of purposes, though the scribbling plant must have been introduced within three years at the most. Reconstructed and applaced by the new every Colonel Thomas Lland, of Hamforth.

They were evidently driven by water power and used for a variety of purposes, though the scribbling plant must have been introduced within three years at the most. Reconstructed and enlarged by the new owner, Colonel Thomas Lloyd, of Horsforth Hall, Armley Mills continued as a fulling mill³ for some years until Gott became Lloyd's chief tenant about 1800 and ultimately bought them from him in 1807 for £23,790. Before this, in 1805, the "Cloth Mill at Armley....the property of Benj. Gott, Esq.," was burnt down, though the Corn Mill was saved (*Leeds Mercury*, Nov. 23). A Pudsey clothier stated in his evidence before the Committee that he was in the habit of having his wool scribbled by "Mr Gott before Armley mill was burnt" (p. 30); whilst an Armley clothier denied that Gott's mill was a factory: "No, that is not a factory, that is for scribbling and slubbing" (p. 13). The Gott Papers confirm this. A cash book preserves the accounts of the rebuilding and refitting of the mill in 1807, when payments to card-makers and for extra carding or scribbling machines and stocks are among the chief items of furnishing.

Precedence has been given to Rogerson's Diary because it deals entirely with the earlier conditions; it mirrors the domestic industry unruffled by storms and with no rumblings of distant thunder. Neither fear of factories nor grievances of cloth-dressers

<sup>&</sup>lt;sup>1</sup> See No. 156. <sup>2</sup> See advertisement No. 154. <sup>3</sup> See No. 155.

have touched the little world of Bramley. Shirley and the Report of 1806, Luddite Riots and the 'Institution' seem utterly remote. Yet the industry at Bramley and in the neighbouring villages had adopted and assimilated all the current inventions. The scribbling mills had steam for their motive power to drive their willeys, their scribblers and carders; the slubbings from the mill were spun on the jenny in the weavers' cottages and the clothiers' houses, and the fly-shuttle had been fitted to the hand-loom. The manufacture had been speeded up, the warp and weft were more uniform, the cloth of better quality. Children had found employment in the mills as pieceners and fillers; the slubber was a new class in the industry and in the village life. But not all these changes combined had shaken the stability of the domestic industry or dislocated its organisation.

This is the frame into which the picture drawn in Rogerson's Diary fits perfectly. Though he must be ranked as a capitalist, every detail of his business was in his own hands and he was ready to turn his hand to almost anything. He and his family were one with the clothiers around them; they made the business a family affair, and they engaged in more than one branch. His father might have charge of the drysaltery and his brother of the wool stapling, but Rogerson called himself a 'drysalter' at his marriage, and the Diary shows him taking journeys to buy wool or to deal in dyewares, though primarily he was a 'fulling and scribbling miller.'

Even more reminiscent of the old order is the farming which creates the very atmosphere of the world of the clothier, occupied as much with his land as with his loom or his 'shop,' and turning from one to the other according to the weather or the season. There was a small farmer-weaver, Cornelius Ashworth by name, writing a diary of his doings at this very time (1782–1816) near Halifax. Only extracts from it have been published,¹ but enough to bring out its striking resemblance to Rogerson's, the more so as both noted the weather and rejoiced at a 'droughty' day.

So the Diary contrasts strongly with the Gott Papers; each is a foil to the other. But when it comes to the scribbling business the Diary is equally useful as a supplement to the Papers. These deal largely with the plans for the equipment of the factory, or rather of the scribbling mill within it, whilst Gott's association

<sup>&</sup>lt;sup>1</sup> The Diary of a Grandfather, by T. W. Hanson. Halifax Ant. Soc., 1916, 233-248.

with Boulton and Watt is a distinctive element altogether. On the other hand the Diary records the daily life within the scribbling mill and follows the week's routine. It is more intimate, more personal, and more human than business documents can be. Yet for all that the Diary is rich in economic facts and details; annual balance sheets, weekly profits, turn-over, wages, charges, all have a place in it. In its turn the note-book on Prices and Processes supplies much technical information about both machinery and methods; though much of it is too technical to be reproduced here. Attention must be specially drawn to the classified list of "People employed at Bean Ing" in 1813, for it provides a complete epitome of the departmental organisation of Gott's factory twenty years after its creation.

### THE COMING OF MACHINERY AND POWER.

The Gott Papers plunge at once into plans for a mighty engine from Birmingham, but there must be a prelude to the story of Bean Ing, and to trace the beginnings it is necessary to look towards south Lancashire. Gott, from the time he was apprenticed in 1780, must have heard of the new inventions which were one after the other stimulating the growth of the cotton industry and spreading into the woollen industry. Two of them, Kay's fly-shuttle (1733) and Hargreaves' spinning jenny (1767), had in fact come into general use in the Leeds woollen industry by 1780, though the spinning wheel had not wholly disappeared. But neither of these could produce any new development in the organisation of the woollen industry. The fly-shuttle enabled one man to do the work of two at the broad loom with a greater output, whilst the jenny speeded up the rate of spinning in the weavers' cottages and the clothiers' houses—and that was all.

The next and most momentous advance was due to the adaptive genius of Arkwright, for his successful development of the roller carding-engine, invented by Daniel Bourne and Lewis Paul in 1748. Hand cards were common to both the cotton and woollen industry for opening out and straightening the fibres and arranging them in a continuous sliver or rope ready to be spun into a thread. Arkwright, between 1770 and 1775, had made the carding engine, with its rollers clothed with cards, a practicable machine by adding a feeding cloth at the start of the operation and a doffer comb to remove the sliver at the end. When this had been done for cotton

its adaptation to wool presented no great difficulty and was bound to come quickly. His more famous spinning frame, patented in 1769, was intended to be driven by a horse gin, but Arkwright soon made use of water power both for the 'water-frame,' as it was then called, and for the carding-engine. The use of steam power followed in due course, for in 1790 he installed a Boulton and Watt engine in his new mill at Nottingham.

Arkwright also exploited the slubbing engine, which was simply an adaptation of Hargreaves' spinning jenny, modified at various hands, to reduce the carded slivers to a suitable size for spinning on the jenny itself. This also passed into the woollen industry, though it continued, like the jenny, to be operated by hand.

Though Arkwright migrated southwards to erect his mills it is certain that the new ideas gradually filtered into the West Riding from Lancashire by the two routes over Blackstone Edge and Stanedge towards Halifax and Huddersfield. Not only was there much intermingling of the two industries along these lines, but the highly specialised 'key' industry of cardmaking had long been established in the Calder valley with its centre in or about Brighouse. The cardmakers were the men who had practical knowledge of the new machines in Lancashire, and they were the men who must have advised clothiers ambitious of making trial of them for wool. The documents here printed show that Rogerson and Gott were both dealing with Abraham Fairburn, Joshua Goldthorp, Thomas Sellers and other cardmakers within this area. Moreover, the Leeds industry had a close affinity with that of Huddersfield (as witness Gott's articles of apprenticeship), so that it is in every way probable that the vogue of the new machines reached the Leeds area by way of Huddersfield and the Calder valley.

These new machines consisted of scribbling and carding 'engines' of a very similar nature, and the slubbing 'engine.' The last was known as a 'billy' and the others were at first spoken of as 'mills.' At the outset it was the clothiers themselves who installed these 'mills' on their own premises and worked them by hand, and presently, as they grew bigger, by a revolving 'gin' driven by a horse. The next stage was their removal from the clothiers' premises to a special building—a mill—where they could be driven by water-power, and to some extent the clothier relinquished the new preparatory methods in favour of the fulling miller, who became also a scribbling miller. But the more enterprising clothiers, individually or jointly, launched out into the

new branch and built scribbling mills where water-power could be found. There was certainly at the time a shortage of fulling mills on the Aire and the south side of Leeds. Joseph Coope, a Pudsey clothier, told the Committee of 1806 (p. 30) that when he was an apprentice, 1790–1795, he was sent with the cloth to be milled to Harewood Mill, and the miller was paid to instruct him.¹ Bramley clothiers also carried their cloth to mills on the Wharfe, at Arthington, Harewood, or Poole,² before the erection of scribbling mills.

All the witnesses from this area, at the Enquiry of 1806, described their training as apprentices when they were either learning to scribble by hand, or "slubbing was beginning to be done at the mill" (Joseph Coope). The evidence of James Ellis, a young master clothier of Armley, is the most illuminating, for it describes the initial stage of hand-mill and horse-mill. "I learnt to slub upon the billy, the master I was apprenticed to had a billy—he had a carding mill which went by horse and a slubbing mill too—it was in the house, but not in the living or sleeping rooms—the carding was by horse, the slubbing and spinning by hand" (p. 63).

That cannot be earlier than 1790; and when he described his own practice in 1806 of sending the wool "to the mill, where it is scribbled and carded and slubbed," he added, "the scribbling is done by hand" (p. 6). Probably this is a reporter's error for "slubbing is done by hand," as undoubtedly it was, though it was done in the mill.

But the new machines had found their way into Yorkshire and were even driven by water-power before 1780. Of this there is positive evidence in a Huddersfield advertisement,<sup>3</sup> in 1779 offering for sale "a complete Scribbling-machine, with new Rollers carrying 46 Pairs of Cards," also "a smaller Machine of seven Barrels or Rollers with cards." The description shows the primitive nature of the machine at this early date; for the rollers were clothed, not with the long fillets introduced by Arkwright, but with the same 'pairs of cards' as were made for hand-carding.

A year or two later scribbling machines began to be used in the Leeds district. The first reference to them is to be found in a report of the examination before the magistrates of "one Mr George

<sup>&</sup>lt;sup>1</sup> An experienced man also went with him. "We never fully depend on the fulling miller, unless we cross him in the hand and give him a decent fee for taking care of them"—Report.

<sup>&</sup>lt;sup>2</sup> Our Village, B. Wilson, 1860, p. 43.

<sup>&</sup>lt;sup>3</sup> Leeds Mercury, January 26, 1779. See No. 148.

Claus from Aix la Chapelle "who was charged in February, 1781, with "having in his possession a machine for spinning woollen yarn," i.e., a jenny. The report continues: "There is no doubt that his sole business was to have stole patterns both of our spinning and scribbling machines, a model of the latter being making at Armley."

The interest aroused by their introduction into the manufacture here is again revealed in the news columns of the Leeds Mercury during February and March, 1784,2 when a Frenchman, who had been settled in the town as a surgeon, decamped with some models, reported at first to be of a spinning jenny. The beadle was despatched to arrest him, and there were found in his possession "plans of a scribbling machine, a willy, and a scribbling-dick," also "cast in brass, wheels for the greatest part of a scribbling machine, a one-handed shuttle, and several other utensils used in the woollen manufactory." It was stated in evidence that he intended to go to America to set up a manufactory. Sent to York for trial, he was convicted and sentenced to twelve months' imprisonment and fined £200. The Mercury felt it necessary "to caution the in general too credulous manufacturers against permitting strangers, especially of a foreign nation, to inspect their machines and improvements," as there had been a similar attempt three years earlier. A few months later a man from the West of England, with a sack full of "models in miniature of every working article used in the woollen and stuff manufactory," was brought before the magistrates. But he was suffered to depart, with the loss of his models.3

There is very little evidence that the introduction of machinery into this stage of the manufacture and at this period was either productive of unemployment or viewed with hostility. The trend of the evidence in the *Report* of 1806 is quite the opposite, nor were scribbling mills even mentioned in the agitation and petitions that led to the Enquiry. But one petition, twenty years earlier, has come to light, and this did allege that the introduction of scribbling machines had thrown thousands out of employ. It was published as an advertisement in the Leeds newspapers on June 13, 1786, and is here reprinted.<sup>4</sup>

Apart from its main argument this remarkable "Address and Petition" is of value for its statement that in 1786 there were

<sup>&</sup>lt;sup>1</sup> Leeds Mercury, February 6. See No. 150.

<sup>&</sup>lt;sup>2</sup> Ibid., February 3, 24, and March 9, 1784. See No. 190.

no less than 170 scribbling machines at work in the district "extending about seventeen miles south-west of Leeds," to or beyond Huddersfield, and nearly as many more elsewhere in the Riding. In this it confirms the conclusion already reached that the use of the new inventions spread into the Leeds area from the south-west.

The Petition does not indicate that it has particular reference to the Leeds area for the signatories, "in behalf of thousands," have not been identified; but it called forth a long letter in reply from "A Well Wisher to the Woollen Manufactory" in the next from "A Well Wisher to the Woollen Manufactory" in the next week's issue of the Leeds Mercury (June 20). This did not deny the main fact, but claimed that "out of the 170 machines perhaps 120 or 130 are very small, and the small ones will not do more work than four men," in place of the estimated average of twenty. As for running them night and day, the writer remarked, "I know very well, in a dry season like this, there are some machines that cannot work more than four hours in twenty-four and very few more than half their time, if they are drove by water." He then showed how other improvements, such as the spinning wheel and fly shuttle, had increased the rate of production, and gave as a further instance "A water-woolley will clean and mix as much wool in one hour as four men could formerly do in a wool in one hour as four men could formerly do in a whole day."

The name of this correspondent leaked out, for the following week the *Mercury* published a still longer letter in reply from the authors of the Petition, under the title "An Answer to Mr Copley's False Arguments in Behalf of Scribbling-Mills." In this they expressed their surprise "that any individual (especially one who calls himself a Clothier) should enter the lists. But our surprise calls himself a Clothier) should enter the lists. But our surprise was of short duration after we got to know that Mr Copley (who is an owner of several scribbling machines) was the author.... Though Mr Copley is pleased to stile himself a Clothier, we are happy to say that out of 1,700 that attends Leeds Cloth Hall, all agree that they ought not to be used, except about nine."

Whether this was so or not, the facts brought to light from the newspaper files show clearly enough that scribbling machines were coming into use in the Leeds district from 1781 or a little earlier, and that their introduction was arousing much interest and at least some hostility. Mr Copley can be identified with Burrow

least some hostility. Mr. Copley can be identified with Burrow Copley, cloth maker of Hunslet, named in the *Leeds Directory* for 1798, and his letter proves that he was one of the pioneers in the

introduction of the machines here and was driving them by water-power in, and probably before, 1786. But they were largely at first operated by hand or gin and by the clothiers themselves. Opposition to them speedily died down, and power was successfully applied for the first time to any stage of the woollen manufacture other than the ancient fulling of cloth. The scribbling mill was born.

There is another description of the events of these decisive years to be found in the little history of Bramley written by Benjamin Wilson Junior in 1860, under the title of *Our Village*. "The following particulars," he wrote, "are extracted from the note-book of a venerable friend who long resided in our township:—

"The first Mill erected in Bramley was "Ross Mill," it was then used for milling cloth only. The first Jenny that came into the town was one of eighteen spindles, and was spun by Thomas Clough, in a house at the Duck-cote, for John Hall, of Elms Grange. The first Scribbling-machine was at Ross Mill, a single one without breast or crank. The first Slubbing that came into Bramley that had been carded and slubbed by machinery, came from Mr Copley's, at Hunslet. The women rose in a mob when the cart came with the slubbing, pulled it out of the cart, and trod it under their feet in the street! About 1791 Horse-mills came up, and were used by Thomas Clough, Town-end; Thomas Cromack, in the Back-lane; Joseph Musgrave, in the town; and by Whitley & Haley, in the Farmer's fold."

To this Wilson added: "They were worked by a 'horse-wheel,' in a similar manner to a 'gin' used in drawing stones out of a quarry, which, by turning an upright shaft gave motion to the machinery. The first Manufactory in the township to which steampower was applied, was Hough Mill, built by Mess<sup>rs</sup> Lister, Barker & Haley, about 1798."

The Bramley contribution dovetails into the rest of the narrative, for it again shows Copley of Hunslet as a pioneer; and then a little later, in 1791, just about the time suggested in the *Report* of 1806, the Bramley clothiers are to be seen setting up horse-gins to do their scribbling at their own houses.

¹ He was William Waite, whose notes Wilson in 1857 transcribed into a book which still exists in the possession of his son, Mr. John Wilson, of Filey. Waite gave a short description of 'The Cloth Manufacture' at Bramley as in 1780, and immediately before the quoted passage he wrote "I have seen clothiers dye their wool at home, have wool-rails to dry the wool on in the open air, also swinging hurdles to swing out the ware; [I have seen the wool] hand-willowed, scribbled and carded on the box, slubbed on one spindle, spun on one spindle, warp wound on to buns (bobbins), to warp in webs."

<sup>&</sup>lt;sup>2</sup> But there was an older Hough Mill than this, for "half of new hough Mill" was assessed in a "Lay made to reimburse the Surveyors of the Highways" of Bramley in 1755.

Then Benjamin Gott comes into the story. Not a line survives to tell how and why a firm of merchants—Wormald, Fountaine & Gott—arrived at the great decision to build a woollen manufactory and to incorporate in it a scribbling mill, the machines of which should be driven, not by water-power, as in Burrow Copley's at Hunslet, but by one of Watt's new rotative steam-engines—and as big a one as the firm could make. But the decision was made, and the man who made it was Benjamin Gott: and on August 4th, 1792, the firm placed an order for an engine of 40 horse-power with Boulton & Watt of Soho, Birmingham. The acknowledgment of the order, from the Foundry Letter Book now in the Birmingham Reference Library, is printed with the Gott Papers in the Leeds University Library, because it is necessary to the understanding of them. It is the starting point of the history of Bean Ing.

Only the barest outlines of James Watt's contributions to the improvement of the steam engine are required to understand the position in 1792. The Newcomen 'fire engine' had been used from the early years of the century for pumping water from mines. In 1769 Watt patented his invention of a separate condenser, and the removal of the steam from the cylinder into this condenser by an air pump. In 1775 he entered into partnership with Boulton of Birmingham, and the firm soon made a success of the Watt engine. The chief and as it seemed to Watt the only demand for these engines was for the old purpose of pumping water and they were chiefly supplied to the Cornish mines. It was difficult enough to obtain money from mine-owners who were on the verge of bankruptcy; but the idea of there being any money at all in the North, where water wheels met any demand for power, appeared simply fantastic. So Watt brushed on one side the advice to adapt his engine to drive machinery, to convert an up and down motion fantastic. So Watt brushed on one side the advice to adapt his engine to drive machinery, to convert an up and down motion into a rotary one. Meanwhile the obvious method by a crank motion had been patented, so that when he did turn to the problem he had to devise other methods, and amongst them one which he called the 'sun and planet motion.' This 'rotative' or rotary engine he patented in 1781, and other improvements and patents followed until 1785. The most important of them was the link gear to obtain parallel motion and so ensure that the piston-rod travelled in a straight line. In 1784–5 Boulton & Watt made several of their new 'rotative' engines, and from 1785 onwards they began to be used in cotton mills in Nottinghamshire and Lancashire, though

only at the rate of one or two a year until 1790.¹ Even after that it was no rare thing for a cotton mill to put in a Boulton & Watt engine merely to pump water back to the upper level to feed the water wheel which drove the machinery. So it was a bold step that Gott took in 1792 when he ordered a rotary engine to drive for the first time all the fulling and scribbling plant in a woollen factory.

There are several drawings of this beam engine in the Boulton & Watt MSS. (Plan No. 93) at the Reference Library, Birmingham; and there are nine others in the Engineering Department of the University of Leeds, presented a few years ago by the late Colonel W. H. Gott. One of the latter is reproduced by the permission of Professor W. T. David and the kindness of the Leeds Philosophical and Literary Society.<sup>2</sup> Quite similar to this is the one at Birmingham, titled "General View of Messrs Wormald, Fountain & Gott's Engine, Dec. 27th, 1792."

The engine itself, variously described as either of 30 or 40 horses power, had a cylinder of  $31\frac{1}{2}$  inches diameter; the stroke was 7 feet, and it probably ran at 20 double strokes per minute. The boiler pressure appears to have been 10 lbs. per square inch, according to Gott's letter (No. 57). The engine installed at Bean Ing in 1793 ran for many years. Its price and the mode of payment are discussed for some months in the correspondence that passed between Soho and Bean Ing.

Professor Heaton has kindly provided a list of all the Boulton & Watt engines that came into Yorkshire in these early years. It will be seen that three smaller ones were ordered for cotton mills in Leeds the same year, and in 1794 one was supplied to Marshall & Benyon's flax mill in Holbeck to replace a water wheel. It was there that Matthew Murray was then making his mark as an inventive engineer, before, in 1797, the firm of Fenton, Murray & Wood started its famous foundry and steam-engine manufactory in Holbeck. The story of Gott's later relations with the Soho firm—and to some extent of the Watt-Murray controversy—is

<sup>&</sup>lt;sup>1</sup> The following advertisement is noteworthy on account of its date, though the purpose of the proposed mills is not disclosed.

<sup>&</sup>quot;Any Persons inclined to advance the Sum of 1500 or 2000 Pounds in erecting a Set of Mills near Leeds to be worked by one of Bolton and Co's Patent Engines are requested to leave their Proposals in Writing with Mr Rob<sup>t</sup> Spence of Leeds...of whom any further Information may by had respecting it."—Leeds Intelligencer, September 27, 1785.

<sup>&</sup>lt;sup>2</sup> See in its *Proceedings* (Scientific, Vol. II, 1929, p. 36), "An analysis of the link gear of an old beam engine," by T. M. Naylor and A. G. Abel.

related separately by Professor Heaton. He has explored the records at Birmingham, and the story has little to do with the woollen industry, though it relates to Leeds, and runs through the Gott Papers.

#### THE PROCESSES OF MANUFACTURE.

The old-time clothier carried out all the processes in the manufacture of cloth—save the fulling—at his own house, with the aid of his family and his servants. The tools of his trade are to be found enumerated in wills of the sixteenth century and notably so in an "Inventory of the Goods of John Pawson of Leeds," made at his death in 1576 by four other clothiers.1 His house in Kirkgate consisted of the "house" proper, a parlour with two beds in it, and one "chamber," with no bed at all, but in its place household and trade stores and much wool, both white and coloured. A stock of "allum" was for the dyeing, whilst five stones of "butter" were for use in oiling the wool. Here the wool was carded, for there were seven pairs of wool combs in the chamber, and probably these were cards rather than the combs used in the worsted industry. The premises also included a "shop," i.e., a workshop, a loomhouse and a lead-house, otherwise the dye-house. There was only one loom, but accompanying it were the bartrees, or warping frame, a wheel, probably the winder or bobbin-wheel, and other things required for weaving. Spinning appears to have been sent out for there were ten stones of yarn and possibly some wool also at the spinners. The shop, corresponding to the croppers' shop of Gott's day, contained the equipment for finishing the cloth, 8 "course of handles" that held the teasels for raising the nap, four pairs of "walker sheares" for cropping it, with a shear-board and its covering, and a "scray," perhaps a frame upon which the cloth could be placed.2 In the shop also were four "fresynge stones," i.e., stones used in the special process of finishing known as 'friezing"—a process to which the note-book devotes five pages, mostly occupied with a minute description of the method of preparing the "frizing-board." Even two "premes" were mentioned separately instead of being thrown in with "all other huslement." They were only the little pronged tools that served to pick out the flocks of wool gathered on the teasels after they

<sup>&</sup>lt;sup>1</sup> Miscellanea, Thoresby Soc., IV, 163.

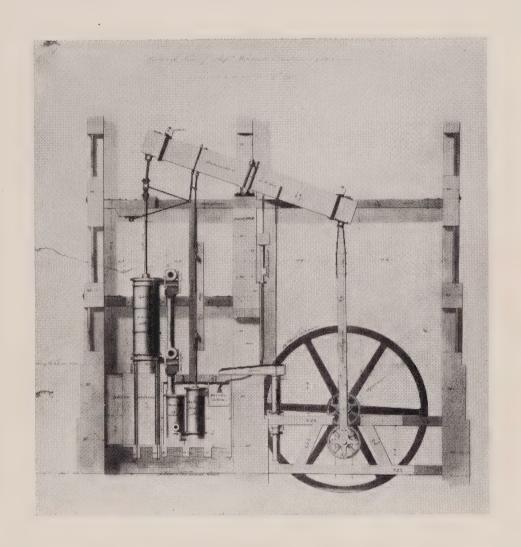
<sup>&</sup>lt;sup>2</sup> "Handles and schraes" are grouped together in the will of John Henrison of Gipton, 1553, as if both related to the dressing of cloth. See Thoresby Soc., XV, Miscellanea, 55.

had been used. If it were not that the "Preemer Boy," the "little drudge of the dressing shops," was thought worthy of a place in the gallery of Yorkshire characters that George Walker drew and described in his Costume of Yorkshire, 1814, the preeme would be a meaningless word. Probably it is never named again in the intervening centuries, although its use continued. Even Gott had need of the preemer-boy, for the list of "People employed at Bean Ing" [p. 307], includes "5 Premajers" in the cropping shops.

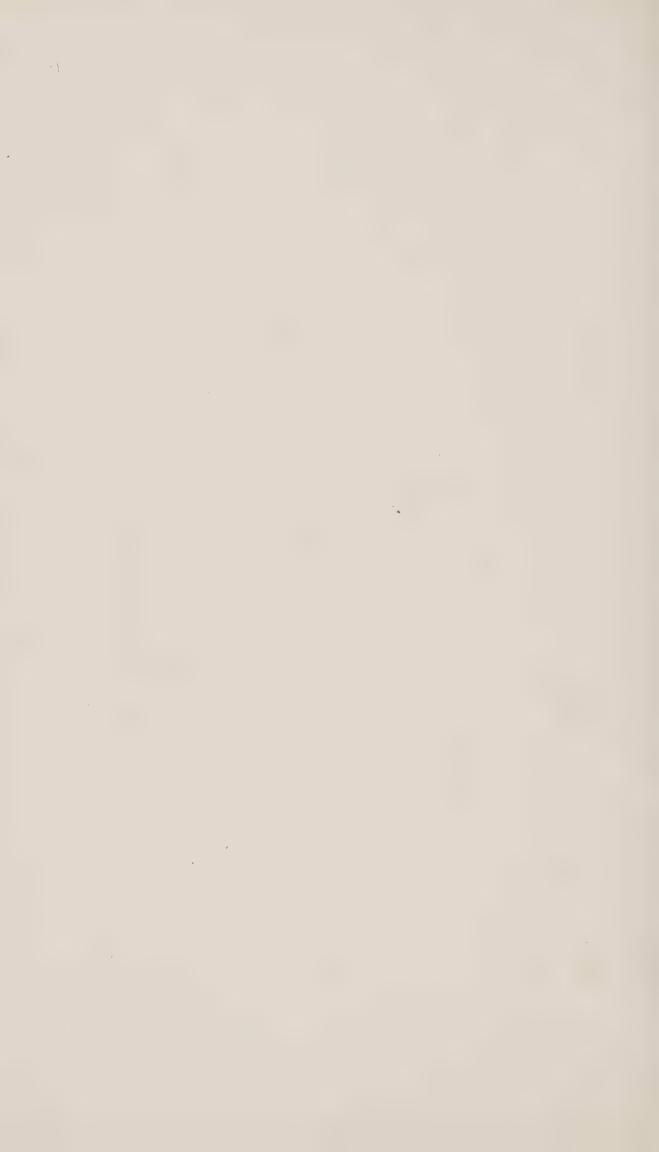
The list of John Pawson's goods at his death in 1576 is a fitting prelude to a study of the new devices and machines that only began to transform the processes of manufacture two hundred years later. In 1776 not a single one of his simple implements had become obsolete, but in the next half century all of them were either discarded in favour of the new machines, or were obviously doomed to be soon swept away into the lumber-room. Meanwhile, for the shorter period under review, John Pawson's house and the industry within it, his loom-shop and lead-house, serve as the background to the picture.

But if there was no change whatever in the textile processes the intervening centuries had brought considerable changes in the organization of the industry. The clothier was no longer the dominating figure; he had abandoned part of his business to others and had lost some of his status. The merchant had become a power. He controlled the last stages of manufacture, the cloth finishing, and was at least influencing the earlier stages. These last stages of manufacture had passed into the hands of the master cloth dresser and Leeds began to be crowded with independent cropping-shops. To them must be added the dyehouses engaged in piece-dyeing to the order of the merchants, or in the indigo dyeing of wool which was beyond the skill of the clothier. The effect of these changes upon the clothier was to drive him out of Leeds, where land had become too dear for him, into the country. This migration to the out-townships on the south side of the river had perhaps scarcely set in before the period under review. But events were leading up to it and the advent of the scribbling mill turned the scale. The exodus of the clothiers from Leeds and the expansion of the townships to the west were important consequences of the new conditions, although they are not much in evidence in the documents here printed.1

<sup>&</sup>lt;sup>1</sup> Sir James Graham stimulated the exodus by building houses with land attached to them for the use of clothiers. His evidence in the *Report* of 1806 (p. 444) is almost wholly devoted to the growth of the out-townships during the previous ten or twenty years.



Boulton & Watt Engine at Bean Ing, 1792



At the outset of this period the trade is seen to be organized into three distinct branches controlled by the clothier or clothmaker, the cloth-dresser or finisher, and the merchant; and apprenticeship was the only door of admission into each. The fulling-miller stood apart, an isolated unit in the industry. The apprentice to a clothier might at the end of his articles remain a journeyman weaver working in his own home with his own loom, or in the house of a clothier; or he might become a master-clothier. The apprentice to a cloth-finisher might similarly either remain as a cropper, or set up for himself as soon as he had saved a little capital. Entry into the mercantile branch was probably less rigidly bound by custom. Gott's apprenticeship was only for a term of four years, in place of the seven required in the others, and there was nothing to prevent a prosperous clothier from gradually taking up the merchanting of his own cloth.

The first subversive change in this established order was the rise of the scribbling miller. The beginnings of this change have already been traced; how for a few years the clothiers themselves operated the new machines on their own premises in a small way, and then were content to surrender the preparatory processes to the scribbling mill driven by water power. Their acquiescence may be explained on the grounds that the new order was a direct benefit; it was similar to the customary arrangements for fulling cloth; and it is probably true that many scribbling mills were launched by clothiers, either individually, or jointly as company mills, for their mutual advantage.¹ The scribbling mill is therefore the natural starting point for a survey of the processes of the manufacture during this period.

#### THE SCRIBBLING MILL.

As Rogerson's Diary is full of references to the machinery in his mill and the note-book also gives details of parts, it seems desirable to give sufficient description of the plant and the processes to make these intelligible. A satisfactory contemporary account of the whole manufacture has been found in Rees' Cyclopædia of 1819, first under Cloth in Vol. 8, and then in greater detail under Woollen Manufacture in Vol. 38, with illustrations of the machinery in Plates, Vol. 4.

<sup>&</sup>lt;sup>1</sup> Company Mill, in Stanningley, often mentioned by Rogerson, was one of the earliest, if not the first of them.

## I. THE WILLY.

The scribbling mill contained four distinct machines, and the first was the woolley-mill, or willy. This replaced the ancient swinging-rods with which the wool was first beaten to open it out and remove some of the dirt. The willy was a closed circular box; within it a drum armed with teeth revolved so that the wool was teazed between them and other teeth fixed on rollers near the circumference. According to Rees it could only receive about one pound of wool at a charge. Wool might be passed through the willy several times, either to break and clean it, or after dyeing, or to blend different sorts, or to mix it thoroughly with oil in readiness for the next stages.

#### 2. The Scribbling-Machine or Scribbler.

Scribbling is nothing more than the first stage of carding. The name came into the industry before the machine, but it is not ancient. Thoresby's reference¹ to the Leeds "Work-house, where poor Boys and Girls are taught to Scrible, a new Invention whereby the different colours are delicately mixed," is one of the earliest uses of the word,² just as his reference to "croppers" in his Diary (1711) appears to be the earliest appearance of that word.

The scribbling machine was practically identical with the carding machine, though the cards on its rollers had somewhat stouter teeth. Its object was to teaze out the wool and straighten the fibres, and when the wool had been passed through two or three times, or through a double scribbler and then a single scribbler, the wool was thrown off in a continuous flossy sheet. The description of the carder which follows will apply equally to the mechanism of the scribbler.

<sup>1</sup> Ducatus Leodiensis, 1715, p. 88.

The word is only recorded for the first time late in the seventeenth century, and then in Scotland, though doubtless it was in use at an earlier date. Curiously, another word, with exactly the same meaning, "tum," "tummer," and "tumming," appeared in the same century, and was also noted by Thoresby. The first recorded use of "tum" in Markham's English Housewife, 1615 (quoted in O.E.D.), defines it admirably and applies equally well to "scribble." "After your wooll is oild....you shall then tumme it; which is, you shall card it over again upon your stocke cards; and then those cardings which you strike off are called tummings." Thoresby supplied John Ray, F.R.S., with dialect words (Letter to Ray, 1703) for his Collection of English Words, reprinted by the English Dialect Society—and amongst them "tooming" and probably "tum." Ray, in fact, gives exactly the same restricted meaning to tum—"to mix woolls of divers colours,"—as Thoresby gives to "scribble," as quoted above. Both meant simply to card roughly. "Tum" only appears to survive now in the name of one of the doffer cylinders on the carding engine called the "slow tummer."

## 3. The Carding-Engine or Carder.

Something must first be said about cards and hand carding, for the use of the word and its modern derivative 'card-clothing' is most perplexing to those unfamiliar with the woollen industry. And no wonder, seeing that card-clothing has nothing whatever to do with clothing or the clothing trade (any more than had the old clothier), or with cards and card-boards. The name of the woolcard is derived from the Latin word (carduus) for thistle applied to the teasel, the thistle-like head of which is furnished with similar sharp bracts. These on the fuller's teasel end in hooks that are very efficient in raising the nap on cloth, but quite unsuited for carding wool. Some other species with straight bracts would be chosen to card or "tease" wool, and it is more likely that the teasel derives its English name from this use than from the other.

For a long time up to the coming of machinery the process of carding had been carried out by means of wire brushes called hand-cards and used in pairs. Card-making was itself a separate minor industry dependent in turn upon that of wire-drawing. Christopher Sly, in the Induction to the *Taming of the Shrew*, described himself as "by birth a pedlar, by education a card-maker...and now by present profession a tinker." His trades had this in common—that they called for a wandering life. The card-maker hawked his goods round the country-side whilst his wife and children set the wire staples into the leather foundation. Richard Overend, "Card-maker at Scholes," who wrote to Gott "consarning them Cards" [see No. 20], was much the same type of man.

The rise of the cotton industry and then the introduction of the carding-engine from it into the woollen industry produced an enormous expansion in the handicraft of card-making, but its growth was almost entirely confined to one small district, where it already existed. Almost all the card clothing manufacturers of to-day have their works within a circle of four miles radius round Brighouse, and have sprung from the cardmakers of this period—the Goldthorps, Fairburns, Sykes, Whiteleys, Sellers, etc. Instead of selling a few hand-cards at a shilling or 8d. a pair, these men were called upon to supply fillets of leather set with similar wire teeth to wrap round or 'clothe' the numerous rollers of a carding-engine. The Bean Ing note-book contains amongst other details the particulars of an invoice showing a total of £87 paid for the cards, either 'fillets' or wider "rows" on a single engine.

<sup>&</sup>lt;sup>1</sup> See the extracts from the Note-book, p. 290.

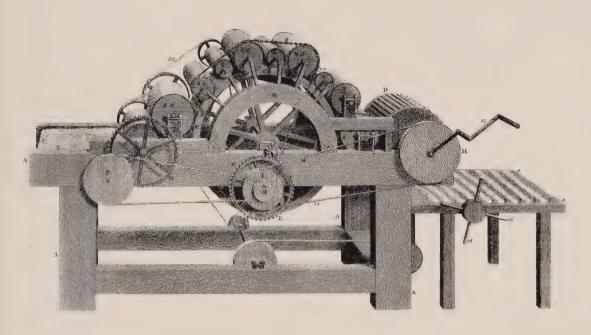
Yet for many years card-making remained a domestic industry. The simplest of tools were used in making the staples, and the setting of them in the leather fillets was done all round the country-side by women and children, who were paid a half-penny per 1,400 teeth set. There was not enough child labour in the West Riding for the purpose—or the price rose—and cards and teeth were sent away as far as Gloucestershire.<sup>1</sup>

The illustration of a carding-engine reproduced from Rees' Cyclopædia will help to an understanding of the technical data in the note-book, and the references in Rogerson's Diary to the Fancy, the Strippers, and other rollers in such a machine. But for a detailed description the original work must be consulted; it is only possible here to give a brief outline. Nor is the engine illustrated exactly the same as any of Gott's carders; it does not even correspond with the letterpress, for it was already in 1819 more or less out of date. But it shows the essential parts and movements of all early carding-engines.

It will be seen that the carder consisted of a number of smaller wooden rollers, all covered with cards, that revolved nearly in contact with the upper surface of a much larger central drum or cylinder, also covered with spiral fillets of cards. This central cylinder, still called the Swift because the relative motion of its surface is the greatest, was in Gott's carder  $32\frac{3}{4}$  inches in diameter, and in the one illustrated 30 inches. The illustration shows three pairs of rollers (Gott's had five pairs) over the highest part of the Swift. The larger ones (marked 2a) were the Workers, the smaller ones (2) were the Strippers. Descending on the right, the next roller (with its bearing supported by two screws instead of one) was the Fancy (also marked 2), and below it came the Doffer (4).

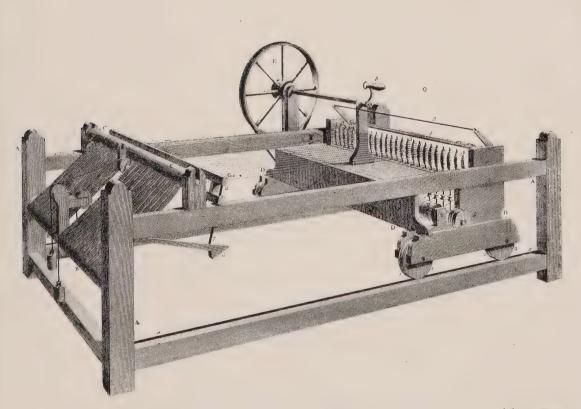
On the left is the "feeding cloth," or "feed sheet," on which the children (the "fillers") placed the wool to go through the scribbler, or the fleece from the scribbler to feed the carder. The feeding cloth moved forward and delivered the wool to the first roller (the Breast, which displaced the early arrangement shown in the figure), and so it passed on to the Swift. The carding, or straightening of the wool fibres, was effected by the Workers and the Swift acting in conjunction; the function of the Strippers was to return to the Swift any surplus wool that remained on the Workers. The Fancy, placed at the end of the series, began the process of loosening

<sup>&</sup>lt;sup>1</sup> See Hand Card Making, by H. Ling Roth; Bankfield Museum Notes, No. 11, 1912; also Industries, by Dr. Maud Sellers, in V.C.H., Yorkshire.



CARDING ENGINE, 1809

After Rees



SLUBBING MACHINE OR BILLY, 1811 After Rees

the wool from the cards on the Swift so that it could be taken off them by the Doffer. The last differed from all the other rollers, and from the Doffer of the scribbling machine by having 4-inch strips of cards, with a space between the strips, laid along it lengthwise. As it revolved a comb was brought into contact with each strip by means of a crank, and removed the film of wool from it.

The fluted cylinder D (with no cards upon it) then rolled these thin films, 4-inches wide by 30 inches long, into rolls an inch or so longer, and these cardings finally dropped off on to the travelling cloth at the end. What looks like a handle (15) is not such, but is a lever to engage the cross (16) and so give an intermittent motion to the cloth carrying the cardings (7, 7) away.

Perhaps the first thought that comes into everyone's mind is that such a complex and such a perfect piece of mechanism, set against the simple pair of hand-cards, or even the 'stocks,' which it replaced, is an amazing advance to have been made almost at one step. The illustration, though drawn in 1809 and published in 1819, shows a carding-engine simpler than any put into Bean Ing by Gott in 1793, and probably gives a fairly accurate representation of the type installed by Copley about 1785. With its aid it becomes possible to follow much more intelligently the story of Bellisle Mill and the equipment of Bean Ing.

The Gott Papers throw some light upon the makers employed to supply the machines installed in Bean Ing. There is first a letter from Joshua Goldthorp, the Clifton cardmaker [No. 32]. He probably means that the Scribbler and Carder, for which he was despatching cards, had been made by Wright & White, whoever these people were. A month later a Lancashire maker, Thomas Leeming of Salford [No. 37], proposed to send two double and two single carding-engines, with cards as well, instead of three double ones.¹ This letter is also valuable because it names three people whom Gott had consulted, but they may be difficult to identify. The note-book "Prices and Processes" (f. 65), mentions two narrow Scribblers as coming from the West of England.

<sup>&</sup>lt;sup>1</sup> The delivery of these machines may be traced in a surviving note for the carriage of machinery from Manchester:

1793. Mess<sup>rs</sup> Worfmald & C<sup>o</sup> D<sup>r</sup>

The facts recorded in this note-book present a fair picture of the installation [p. 290]. There were 7 Scribblers and 8 Carders¹—some of them double engines, and apparently there was that number in the upper scribbling room in 1813, with a child "filler" at each. The single scribblers had 16 cylinders and the double 25 cylinders with cards on them. The card clothing of a new double carding-machine is given in detail and corresponds closely with the invoice of Abraham Fairburn of Hightown, Liversedge, in 1811.

# 4. THE SLUBBING BILLY.

The last process carried on at a scribbling mill was slubbing, by which the cardings were pieced together, and twisted just enough to enable them to be drawn out and wound on to a cop or bobbin. Like the spinning jenny, the slubbing billy is characteristic of this period, for it was afterwards superseded and the woollen industry ceased to make slubbings or to employ slubbers. For that reason alone Rogerson's Diary, with its constant reference to slubbers, is of value for the light it throws upon the period. The name and a similar process remain in the cotton industry, but the billy never drew out wool to the extent necessary with cotton; the cardings were never combined or rolled together as are the slivers of cotton to be drawn out again and again.

The slubbing billy illustrated in Rees' Cyclopædia (1819) and said to be then "universally employed" is a primitive affair with a wooden frame, worked entirely by hand. At the end of the description a paragraph is added stating that "an improved slubbing-machine has been introduced, which is put in motion by the mill, and the carriage is made to draw out by the power of the machine. The spinner has only to push the carriage in and turn the handle in order to wind up the slubbings." So even that only represents a partial application of power. But it is highly probable that the billy was worked entirely by hand with rare exceptions. Its actions and motions were exactly those of its parent, the jenny, which remained purely a hand machine. The scheme of distribution of power from the engine at Bean Ing in 1796 [No. 63] allotted 14½ h.p. to '29 scribbling and carding engines and 3 willys,' i.e., to the scribbling mill, but the billies were not included. Rogerson, at the opening of his Diary (Jan. 4, 1808), gives a similar list, with the billy excluded, for a mill at Yeadon. The same distinction can be seen even more definitely in the advertisement of the sale of a scribbling mill at Hunslet in 1793 [No. 161]; some of the machines driven by the

<sup>1 &</sup>quot;7 Scribblers if properly managed will supply 8 Carders."—f. 56.

"Fire Engine," a carding machine by the "Beck"...." together with two Billeys." The only example to be found of a billy driven by power comes from Halifax, where the extensive plant of Hebble Mill, Wheatley, put up for sale in 1804, included "Three Water Billies," of 120, 88, and 80 spindles respectively, and "Four Hand Billies of 30 spindles each."

In comparison with the jenny the billy is now little known, so the plate in Rees' Cyclopædia has been reproduced as a guide to its mechanism. It consisted of a travelling carriage (DD) on which were set fifty or more upright spindles (3, 3). These could be revolved rapidly by the slubber turning the winch (b) with his left hand as the motion was transmitted by wheel and belt to the cylinder (F). With his right hand on the rail (4) he could draw the carriage backwards and forwards, and also, when necessary, lower the wire (8) until it depressed the threads. On the left was an inclined revolving cloth upon which the pieceners placed the cardings (one to each spindle), and pieced on new cardings as the first were used up. In front of the roller (C) were two rails, known as the clasp or "clove," for the upper rail (G) could fall and hold the cardings fast.

the cardings fast.

For a start the carriage was brought up to the extreme left, and in coming back it had lifted the lever (6) and opened the clasp. Then the slubber began to move it away to the right and to revolve the spindles. At the same moment the endless cloth began to travel and to deliver cardings. But this movement stopped just as the roller (5) on the carriage (midway between the wheels, but above them) passed the lever (6), and it fell, bringing down the clasp on to the cardings. Eight or nine inches had then come out beyond the clasp, and without any strain upon them these cardings were being twisted because the clasp was higher than the tops of the spindles, and so the slubbings were slipping over the tops. This gradual twisting went on as the carriage was pushed up to the far end, and at the same time the eight or nine inches of carding were drawn out into 70 inches of slubbing.<sup>2</sup> The slubber then reversed the rail (4) to bring the wire (8) down on to the threads and depress them so that they began to be wound up on to the cops, and at the same time he began to draw the carriage back to the left at a proportionate speed.

Some of these figures have been obtained from the note-book, and other facts relating to the output of the slubbing billies may be

<sup>&</sup>lt;sup>1</sup> See No. 181. <sup>2</sup> See the Bean Ing Note-book, f. 66, on pp. 291-2.

found in the extracts from "Prices and Processes," ff. 65, 66, 67. Four of the billies installed at Bean Ing in 1794 were made by Thomas Leeming of Salford [No. 53], and one of them only carried 30 spindles. Samuel Fortune of Halifax also supplied one [No. 52]; and it is possible that John Jubb, the Leeds millwright, also made one or more, though the surviving contract [No. 49] only relates to "two Machines or Things called Willies," at £31 10s. each.

## SPINNING AND WEAVING.

The wool, in the form of slubbings, was then returned to its owner, the master clothier, or was collected by weavers or spinners in his employ and working either in his house or in their own cottages. The next process, spinning on the jenny, might be done either by women or by apprentices; every clothier had one or two jennies in his house, and many weavers had one. But it is rare in the Leeds district to find, outside the few "factories" mentioned in the Report of 1806, any example of jennies being put into scribbling mills or gathered together in numbers in the houses of manufacturers. Gott's introduction of three or four dozen jennies into Bean Ing in 1793 marked a very great departure from the accustomed practice of the district.

The spinning jenny was never worked otherwise than by hand, and it was so similar to the slubbing-billy (which was derived from it), and so much better known, that little need be said about its structure and use. The spindles, driven as before, were fixed at one end of the frame, whilst the carriage consisted of little more than the clasp or "clove," and ran on the top bar of the frame. The cops of slubbing were fixed in a sloping frame, placed low down, and each slubbing was threaded through the clasp and so to a spindle. As the carriage was withdrawn from the spindle end the slubbings were first untwisted and then drawn out two or three times their length, and simultaneously received a twist in the opposite direction, and then were wound on to the spindles.

Only one memorandum relating to the supply of jennies survives in the Gott Papers. It is an invoice [No. 44] for 2 40-spindle Jennies made by Hardy & Moss. The organisation of the Spinners' Rooms at Bean Ing will be more conveniently described later with that of the Weaving Shops. But there was one other machine in the room that calls for particular notice now. Its presence is only revealed by the list of workpeople taken in 1813 [p. 307] that included "2 Mules Spinners," who with two boys operated two of

Crompton's Mules. As there was no power in the spinners' rooms these mules must have been operated by hand, and it is likely that the two machines were being used for finer work, as the mule was suitable for both warp and weft yarns in fine counts.<sup>1</sup>

This is the only record of mule spinning in the woollen industry within the period under examination. William Hirst, whose influence on the Leeds industry is considered later, made a claim that he was the first to introduce "spinning mules" into the woollen manufacture, but the date cannot be earlier than 1816. Up to the close of this period, and probably until after 1830, when Crompton's mule had been made 'self-acting,' it made no headway in the woollen industry. Throughout the early nineteenth century the West Riding could show side by side cotton mills spinning with Crompton's mule, and worsted spinners using Arkwright's water-frame or throstle (named according as it was driven by water or steam power), whilst the woollen industry retained the hand jenny of Hargreaves both in cottage and factory.

Up to this point the manufacture had by the opening of the nineteenth century absorbed and become transformed by the new inventions born of the cotton industry. Beyond this stage the Leeds woollen industry continued for a good many years to abide by the old traditional processes and implements. Nominally there is one exception, for the fly shuttle was the earliest of the inventions and had rapidly won its way into the woollen industry. But the fly shuttle produced no break with tradition; it made the hand loom a more efficient instrument, without in any way disturbing the domestic system of organisation.

The master clothier, the hand-loom weaver and the cropper, with unchanged tools and methods, remained important figures in the industry, not only to 1820, but beyond it. Parallel with them the new manufacturer—the factory owner—was steadily making breaches in the domestic system, but he made little progress in disturbing the traditional processes, or in introducing new machinery. When an attempt is made to follow the hand-loom weaver at work in his cottage, to see him warping, sizing, drying, scouring, doing all manner of things besides weaving, all in the most primitive way

<sup>&</sup>lt;sup>1</sup> It is also possible that they were in use to spin cotton, as swandowns and toilinets, which were manufactured at Bean Ing, were made with a cotton warp. The Gott Papers provide no clue, but amongst the selected Advertisements No. 177 shows Robert Cookson, of Holbeck, presumably the clothier [see p. 27], offering employment to mule spinners in 1800. But Bean Ing could readily obtain cotton warp, for in No. 180 a firm offers warp to the manufacturers of Swandowns and Toilinets.

with bobbin-wheels, frames, creels, and other home-made minor contrivances about him, it becomes plain that the art of hand-loom weaving remained virtually untouched by the spirit of progress. A similar retention of old tools and methods was to be found in every cropping shop in Leeds. What, then, of Gott's great factory at Bean Ing? Could it not show new machinery, even if not power, applied to the weaving and finishing of cloth? The answer must be that in neither branch did it dispense with the traditional hand processes. Neither in name nor in methods did the weaving shops, the burling chamber and the cropping shops at Bean Ing mark any new departure. What was new was the factory organisation, and in the weaving a division of labour in place of the old system of apprenticeship. As far as weaving and finishing are concerned the industry in 1820 was much nearer what it had been in 1770 than what it became by 1870. The scribbling mill had in it the germ of the modern woollen mill, but there was a long lull before it developed into one.

#### THE CLOTHIER AND THE WEAVER.

Instead of attempting to sketch all the processes the yarn underwent at the hands of the clothier before the cloth was ready to be sent to the 'mill,' it seems better to allow some of those who knew the clothier and the hand-loom weaver to describe the conditions. After that, attention can be paid to the methods used by Gott in carrying on the same processes under a factory organisation.

The old Yorkshire clothier has, in fact, become a tolerably familiar figure in recent years. He is painted in glowing colours in some of the most famous passages in Defoe's Tour through England and Wales. He is to be encountered on almost every page in Heaton's Yorkshire Woollen and Worsted Industries. A very homely picture of the clothier's household about the middle of the eighteenth century is to be found in an anonymous MS., "Poem descriptive of the Manners of the Clothiers," from which Professor Heaton has quoted the best passages. One or two phrases in the narrative are all that prevent it being equally true of the clothier's household in the early nineteenth century. Lastly, the Leeds clothier is to be found mirrored in the pages of the Report of 1806. It is worth while to glance through this to see what he had to say of himself, his craft and the changing conditions during his lifetime.

<sup>&</sup>lt;sup>1</sup> In a volume titled Matters of Interest in the Leeds Reference Library.

<sup>&</sup>lt;sup>2</sup> See pp. 344-346.

Three Leeds master clothiers were chosen to give evidence before the Committee of 1806, and they presented a very consistent and adequate story of their apprenticeship and their calling. James Ellis of Armley described himself as a small manufacturer of superfine broad cloth. He had in his house two hired journeymen, one apprentice, and a boy to do odd jobs, and for these there were three looms and a jenny. In this he was very much like his neighbours, and there were around him in Armley 120 master clothiers who purchased raw wool and sold manufactured cloth. But many of these also employed out-weavers, up to eight or ten; he had only a man and wife spinning for him in their own house with their children winding bobbins. As he used some Spanish wool for superfines, and it was dirtier than English, he sometimes employed a few women and children in moiting the wool and burling the cloth. There was not a farmer in Armley who made his living by farming without trade. He himself had four and a half acres and lived upon it. Others had only two or three acres, enough to keep a cow or a galloway, or at least half a rood to hold the tenters. But rent was high, £3 or £4 an acre, and he had been asked £6 an acre by Gott for a field next his own.

Joseph Coope of Pudsey represented the coarse cloth trade that used only English wool. He had only one journeyman, hired by the year, and two apprentices in the house, with himself and his wife. For these he had two looms and two jennies. The coarse clothiers bought the wool mostly in the fleece, separated it and dyed it themselves. They were so fond of land that there was no such thing as getting any without favour, and the price was very high. Pudsey he described as "the largest country village perhaps in England," and Stanningley as "the most improved place in the West Riding that I know of." There were in Pudsey three to four hundred men who had served their legal apprenticeship, of whom more than two hundred were master clothiers; there were also two or three hundred who had been trained by their parents, and eighty of them were masters. Coope himself had dealings with Gott: he "sold more cloth to Mr Gott than to any other man," and he used to have his wool scribbled at the Armley mill.

Robert Cookson of Holbeck was an example of the clothier trained by his father without being apprenticed, and was a maker of fine goods, second sorts, between superfine and coarse. He had three looms in his house and employed one or two out-weavers as well, but had no apprentices. Using some Spanish wool, he employed a couple of women in moiting it, and two or three more in burling the cloth. There were four journeymen weavers, paid by the piece and earning regularly the whole year 15/- or 16/- a week. They kept two spinners going and made two pieces a week ready to be milled. In all there were eleven or twelve persons employed, and the wage bill was about £6 a week. Dyeing was done on the premises, except blues (i.e., indigo), which had to be "done at the dyehouse," by which he meant that the wool was sent to Leeds.

These three may be accepted as typical of the industry and it will be seen that their businesses were all run on similar lines and were all on much the same scale. But a few clothiers had exceeded the customary limits and had stretched the domestic system almost to the breaking point. James Walker, a manufacturer of superfines at Wortley, told the Committee that, beginning at the age of 21 with one loom and one journeyman in his house, he had in 1806 eleven looms there and ten more in the weavers' homes. But that was not all. He was in fact if not in name a fulling and scribbling miller as well as a clothier, and had upwards of a hundred workpeople employed "in the house," with twenty or thirty more weaving and spinning for him in their homes, but not a single apprentice. As Walker also finished or dressed part of his output of cloths and sold them direct to order, and not at the Cloth Hall to merchants, it is evident that he had burst all the bonds that restricted the domestic clothier. His starting point was different, his scale of business much smaller, but there is nothing else to distinguish his operations from Gott's. Yet a journeyman weaver (William Child), who had worked twenty years for the Walkers of Wortley, would not go to a factory, though his children had worked at Gott's. His point of view is intelligible, for though he had worked in Walker's 'factory' at odd times, his weaving was ordinarily done in his own home where he had two looms and a jenny and where his children could assist him. But his alleged objection to the factory was that he was called upon "to do all kinds of work, such as tentering and preparing the cloth for the fulling mill and cuttling ....which amounts upon an average to one day in eight without any pay for it."

It is doubtful whether this alleged objection was the genuine reason for his dislike of factory life. The fact was true enough, but it was not distinctive of the factory; the journeyman clothier, whether he worked in his own house or his master's, was called upon to do many odd jobs for which he received no pay. Not

only had the weaver to turn spinner or dyer on occasion, but the domestic system always entailed much fetching and carrying at almost every stage of the manufacture. New conditions, as the partial segregation of processes, the expansion of the industry, and the rapid increase in the class of cottage weavers, aggravated the burden. These new conditions that arose within this period prevailed more or less to the middle of the nineteenth century, and the hand-loom weaver as long as he survived was called upon to waste much time seeking work, *i.e.*, warp and weft for a piece of cloth, sometime from this, sometime from that 'manufacturer,' in carrying it home and then carrying back the cloth. Many a long 'weavers-gate' across the moors, many a 'taking-in room' with worn steps, still survives to attest this last phase of the domestic system.

These conditions prevailed generally. A Gloucestershire weaver, who went seven or eight miles for his work, described to the Committee of 1806 the deductions from his pay to meet the cost of sizing, bobbins, and so forth, and the time consumed in fetching and carrying home. The routine of the weavers around Leeds and their difficulties are perhaps set out most clearly in a series of articles that appeared in the *Pudsey District Advertiser* in 1886, and were published under the title of *Progress in Pudsey*, by Joseph Lawson.

In the earlier letters the author was evidently writing from his own knowledge of conditions that prevailed quite sixty years earlier, *i.e.*, about 1826, and they are scarcely to be distinguished from those that existed before 1820. This was so because the slubbings from the scribbling mill were still the starting point for the domestic industry, and the jenny had not been displaced by the mule. Thus Lawson wrote of the slubbers working the billies:

"Slubbers drew out the cardings, and wound them on to coppings as slubbing, ready for the spinners to spin on their jennies. Slubbers could earn about twice as much as the hand loom weavers, but paid the little boys and girls who were piecers (rubbing the carding ends together) a very small pittance—only 3/- or 3/6 for standing doing their work a whole week of sometimes ninety hours. Though these slubbers could earn such good wages, yet as a class they were considered a drunken people, and somewhat extravagant in other respects.... They thought themselves much superior to hand loom weavers, and

<sup>&</sup>lt;sup>1</sup> John Mills of Owlpen near Uley.

<sup>&</sup>lt;sup>2</sup> Letters to the Young on Progress in Pudsey during the last Sixty Years, by Joseph Lawson; Stanningley, 1887. See Letters vi, vii, viii, xiii, and xiv.

refused at times to sit and drink with the latter in the taproom at the alehouse, and passed into the bar.... In course of time a terrible change took place for these proud slubbers—a machine was introduced which made the system of slubbing on what was called the 'billy' useless; it was called the condenser' (pp. 34, 35).

"The cloth made at this time in Pudsey is mostly made of coarse wool, thick spun, and woven in an open 'set,' or gears and slays.... It is not long since the picking stick and flying shuttle were introduced.... There are spinning jennies now,¹ one with 50 spindles is considered a great affair; there are many 38 spindles, and we have spun on one of that count for days together nearly twenty years after the time we are speaking of. Nearly sixty years ago some of the people walked to Bramley, Armley, Farnley, and Wortley, backwards and forwards, every day, to weave or spin others' work at manufacturers' houses in the village; while others have looms in the chambers over where they live, and get work from makers in slubbing coppings from the slubbers at the mills, which they draw out on the jennies into warp and weft, and weave into cloth on their hand-looms.

The cloth makers are a hardworking, resolute sort of folks, and we have heard one tell how he had fetched a pack of wool on his back from Halifax, and 'litted' it, that is, dyed it, the same day, and that it was not uncommon for persons to do it. Places for dyeing, called lead-houses, are to be seen throughout the village, and many woollen manufacturers have one on their own premises. The wool is mostly dried out of doors, as are cloths, on tenters.... At first all yarns were spun into coppings, the weft about half the twist of the warp, and the former is still wound on to bobbins on the one spindled wheel ready for the weaver's shuttle..... In a while we see a great change. Wires are put round the jenny spindles to hold the bobbins by the staples and to make them go round with the spindle, and thus supersede the winding on the bobbin wheel" (pp. 21–22).

"Some of the wool used has many burrs and 'moits' (as motes are called) in it, and a large number of women and children fetch it, a stone at a time, to moit, for there are no burring or moiting machines to take them out. Weavers have to wet or 'leck' the pieces when woven by putting on a liquid to scour or wash out the grease, etc., at the mill, and it is quite common to see weavers carry these pieces full of a not very sweet liquid on their

backs, or in a wheelbarrow" (p. 23).

Then he gives a description of the old method followed by the weaver in wetting the bobbins of weft—by immersing them in water and sucking away the air entangled in them by a mouth sucker. Later this was replaced by the "bobbin sinker," a little tin pump, like a boy's squirt, with the "wooden stopper wrapped with weft."

<sup>&</sup>lt;sup>1</sup> Lawson's use of the historic present tense in all this passage is confusing.

<sup>6</sup> Now' referred to the time sixty years back of which he was writing.

Letter VII then describes the "trials and difficulties of hand-loom weavers" as follows:

"It was quite common [even] when trade was not bad to see weavers and spinners going from place to place seeking work, or to get a piece of cloth to make. If they succeeded it was mostly on the condition that they helped to break the wool for it; that is, opened the bales, then the fleeces, taking off the coarse parts called the 'britch,' put it in sheets, then go to the mill and help to scour it, then 'lit,' or dye it, and the morning after take it out of the dye-pans into sheets ready for the dryhouse. If to dye black, then the wool had to be scoured, that is, a foundation for the colour given it ready for dyeing the day following. All this was for nothing, except in some cases a small allowance for a little ale, or cheese and bread. If the wool was taken to Leeds to dye indigo blue, then it was only to open and britch, and to be looked over.... when it came from the dyehouse. However, after doing all this work, the weaver did feel somewhat relieved, knowing that he had a claim now to a share in working it up when he could get a set of slubs to be spinning a web on the jenny. The small manufacturers sometimes put all the blend out in single pieces, that is, single webs (but mostly in 'cloaths,' two web lots<sup>1</sup>), as he wanted to have the cloth as soon as possible to market. When the slubber had doffed the first set of slubbing, it often became a serious question as to whose turn it was to have it....and sometimes all the slubbing for the warps would be fetched from the mill in odd sets as doffed.... Then lists for the cloth's selvidge had to be laid up at the master's house, and sometimes there was waiting there either for the listing, or their turn on the bartrees" (p. 27).

"When the web was warped there was the sizing process to go through, and the weavers, as a rule, had to buy their own size.... Well, the weaver might have to wait for his size at the sizing boilers, and the size varied in strength....sometimes a little size Conference might be seen deliberating as to which size-pot would be safest to pull the web through...."

"After sizing the web, one of the most critical of all the processes is to put it out of doors to dry.... A place is chosen, the web-sticks or stretchers are put out, and if frosty, a pick-axe is used to make holes in the ground for posts to hold the ends of the web, and a maul to drive them down...."

"In winter time and when fine weather is scarce, webs get only partly dried, and have to be hung before the house or stove fire to finish; but it is quite a common thing to see a number of weavers who say they are 'laking for druft,' that is, waiting for fine weather to dry their webs. Yes, 'druft,' as it was called, was a most momentous matter with the hand-loom weavers. The next thing was the sort of gear and slay he must have, and owing to the sets having begun to vary so much, it was seldom that the same set

<sup>&</sup>lt;sup>1</sup> This is Rogerson's "cloth of wool," whilst a "web" is a piece.

could be used many times in succession. Gears and slays were rather expensive for a weaver, and they had mostly to find their own; therefore there was much lending and borrowing of gears"

(p. 28).
"Let us now suppose the weaver has 'felled,' that is finished weaving his web. The next thing to be done was to 'leck,' or wet it ....ready for the carrier to take it to the mill to be scoured. When fulled or milled....there was tentering. Probably now1 it would be done in the tenter-house, which was made almost as hot as an oven, if on the day before Leeds market, and when dried the cloth had to be 'teemed,' which means being taken off and laid on the grass to get the dew, and pulled along to clean it, to give it a proper 'handle' or 'touch' to the merchant.... After standing out with the cloth a proper time to catch sufficient dew, it had to be listed and cuttled, and put under a weight ready for the carrier taking it to Leeds market the following day" (p. 29).

There is an effective summary of all this in a later chapter (Letter XIV) describing the coming of the power loom and the tragedy of the old weaver, proud of his discarded hand-loom once admired by all and now covered with dust and cobwebs, waiting to be broken up for firewood.

"Power-loom weavers have not to buy looms and a jenny to spin for them; or bobbins, flaskets and baskets; or to pay rent and taxes for them standing; nor candles, or gas and coal for lighting and warming the workshop. They have not to pay for repairs, for all wear and tear, for new wheel bands for the jenny, for steps, laphes (loops), wharles, and for oil to grease with. Nor have they to buy shuttles, pickers, side-boards, shop-boards, shuttleboards, picking-sticks, and bands and cords; or gears, slays, web sticks and rattles. They have not to fetch slubbing, warp their webs, lay up lists, size, put the webs out to dry, seek gears, leck pieces, tenter, team, dew and cuttle them; and least of all would they think of breaking wool, scouring and dyeing it all for nothing too. No, it would not do for a power-loom to stand while the weaver did all the odd jobbing " (p. 91).

Lawson's picture of the life of the hand-loom weaver is so true to the period that it seems indispensable to a history of the industry, for it deals with an aspect that is unrevealed by the documents, and it is in such a form that it would otherwise remain quite unknown—hidden as it is in a local publication long ago out of print.

With this insight into the hand processes and simple implements of the cottage weaver it is now possible, with greater advantage, to turn to the corresponding stages in the factory organisation at Bean Ing.

<sup>1 &</sup>quot;Now," i.e., sixty years since, about 1826.

## THE WEAVING SHOPS AT BEAN ING.

The organization and size of the spinning and weaving departments at Bean Ing are only revealed by a close analysis of the memoranda contained in the note-book on Prices and Processes. The rest of the Papers do not disclose a single fact, except what may be gleaned from the Insurance Account after the fire of 1799 [No. 64], and the significant fact in it is that the insurance upon the weaving shops was very low, unless items 6 and 7 had reference to such. It is difficult to know why the Committee of 1806 did not invite Gott to attend as a witness (unless he had declined to do so), instead of trying to elicit the facts about his factory from witnesses who had never been inside it. Thus, Coope of Pudsey was asked "Do you know whether Mr Gott carries on weaving in that Factory?" and gave the perfectly futile answer "I suppose he does, but cannot speak positively." Another, being questioned as to the number of looms there, could only tell the Committee that "the length of Mr Gott's buildings in which he has his looms" was 70 or 80 yards at a guess!

The key to the secret is provided by the list of "People employed at Bean Ing, Sept. 29th, 1813, taken by J.D.," and this definitely excludes any people working out. The "Spinners' Room" con tained 70 workpeople, of whom 48 were spinners grouped into five unequal sets assigned to "J.G.R.," "B.H.," "B.R.," "J.D.," and "J.M." respectively. The first three of these names, for the initials stand for names, appear again in the "Weaving Shops" in charge of 38, 46, and 49 weavers respectively, and a smaller number of winders. This gives a total of 133 looms, allowing one weaver to a loom; the warping was done in the spinners' room and the bobbin winding in the weaving shops, so that in all there were 253 operatives engaged in spinning and weaving by hand.

But the main interest lies in the status of the persons concealed

But the main interest lies in the status of the persons concealed by the initials. They were not overlookers, but may, with confidence, be identified with the "5 Manufacturers" who head the same list. The reason for this claim is that four of them are named again and again in the pages that record the piece rates paid to spinners and weavers for their work. The names there met with are "Mr Read," B. or Benj. Horsfall, Batley Royston, and James Mallelieu. The fifth name appears elsewhere [f. 33] and is Joshua Dixon. He and Wm. Pritchard conducted the "Experiments made in the Dye house, Park Mill, 9th Septr, 1800."

<sup>&</sup>lt;sup>1</sup> The table is given in full below at the end of the Extracts from the Bean Ing Note-book. See p. 307.

Dixon was Gott's nephew and reports or messages from him are occasionally to be found in the Hopps' Letters. Though he appears to have had some small responsibility in the Spinners' Room he was not concerned with the practical side of weaving, and his chief duty was the supervision of the plant and the fabric. He might be called the works' manager, and with some knowledge of chemistry, or a 'philosophical mind,' he supervised the experimental installations.

Of the others the one always called "Mr" Read in the note-book was clearly the most important. He had only the smallest number of looms (38) in his charge, but the highest number of jennies (17), and he was manufacturing the most expensive cloths turned out from Bean Ing. In spite of a discrepancy in an initial he must be identical with the "T. G. Read, gentleman, Park House,<sup>2</sup> Bean Ing," of the Leeds Directory for 1817. It is probable that he was engaged in the manufacturing from the commencement. The same volume also gives "Joshua Dixon, gentleman, Burley bar"; "Benjamin Horsfall, woollen manufacturer, top of Quarry hill"; and "Batley Royston, overlooker, Fountain street, Kirkstall road."

In spite of their varied description in the Directory, three of these, namely J. G. Read, B. Horsfall, and Batley Royston were in 1813 sharing between them the responsibility for the weaving or cloth manufacture at Bean Ing, and were paying wages independently of each other and of Gott at rates fixed by themselves. standing in relation to Gott is revealed by another page [f. 61, see p. 306] of the same note-book. It contains a rough estimate of the annual gross profit at Bean Ing, drawn up in 1815, and the figures are arranged under several heads. The first deals with the profit from the scribbling mill, i.e., to the completion of the slubbing. The second deals with the weaving, or manufacture, and the profit consists of a percentage (id. a yard, or  $1\frac{1}{2}d$ . a yard for the higher priced goods) upon the cloth made by each of these three manufacturers. They were not weaving on commission for Gott, but he was receiving a commission (that totalled over £4,500 a year) from them, in lieu of their overhead charges, on the cloth which they made to his order and which he bought from them.

They made a further similar payment which forms the next item. This was a percentage on the value of the wool used by them—5% on English and  $7\frac{1}{2}$ % on Spanish and superfine English

<sup>&</sup>lt;sup>1</sup> See letter No. 73.

<sup>&</sup>lt;sup>2</sup> Park House was situated to the east of the Bean Ing estate, being the 'Park Buildings' shown on the Plan of 1815.

wool. The figures show very clearly how Mr. Read was manufacturing only the highest grade of cloth and Batley Royston 'low class' goods; and the estimated total under this head was £1,800. There is nothing further to show whether these three manufacturers bought the wool from the firm in the form of slubbings or not. But their general relation to the firm appears to have been very much the same as that of a subsidiary company to a modern combine. Some such arrangement was almost a necessity, for Gott and the Wormalds were merchants without any technical knowledge of manufacturing.

The position of James Mallelieu is more obscure. His name The position of James Mallelieu is more obscure. His name suggests that Gott had brought him from Huddersfield. He had only three jennies in the spinners' room and had no place in the weaving shops, at least no share in the arrangement just described. Yet he was in charge of some looms for "The Prices James Mallelieu pays for weaving Cassimeres" are quoted in the note-book (f. 44). The most likely explanation is that Mallelieu did not, like the other manufacturers, provide his own looms, but was in charge of a number owned by the firm. In support of this there are details of the cost, etc., of eleven looms in the note-book (f. 80). These looms can be traced again in the last entry in the return of the 'Number of People Employed' in 1813 [p. 307]. This apparently supplies an accidental omission from the table, and the mysterious 'Moscow' may be a nick-name for the place where the looms stood.

# THE FULLING MILL.

Wherever woven, the cloth at this stage was ready for the 'mill,' as soon as it had been examined and defects removed or mended in the Burling Chamber. Both Gott and Rogerson were lifting the stocks by steam power, but otherwise there was no departure from the processes that the water wheel had operated for centuries. A 'pair of stocks' consisted of two heavy wooden hammers that were lifted alternately by tappets fixed on the revolving axis of the wheel, and then fell back on to the cloth. But there were two kinds of stocks, for cloth went through two distinct treatments at the mill.

Rogerson names the two kinds—faller and driver—on the first page of his Diary, and the difference can soon be explained.

The driving stocks came down in a slanting direction, and instead of pounding the cloth, threw it up and swirled it so that it fell back again as they rose. The falling stocks came down almost

perpendicularly and pounded the cloth.

In the first place the cloth had to be 'scoured' or cleansed from the oil with which it was charged. An ammoniacal liquor was desirable for this purpose, and invariably the offensive concoction made up from the domestic "wash" was utilised until gas-works provided a new cheap supply of ammonia.¹ Lawson of Pudsey described how the weavers themselves soaked the pieces in this preparatory to carrying them to the mill, but the millers also collected and stored it for their own use. In scouring, according to the note-book (ff. 74–76), the fallers were used first and then the cloth was transferred to the drivers, where, after half-an-hour's further treatment, water was run in and the stocks run till the cloth was clean. It was then tentered or dried and sent to the burlers, who picked out all the stray bits of foreign matter attached to it.

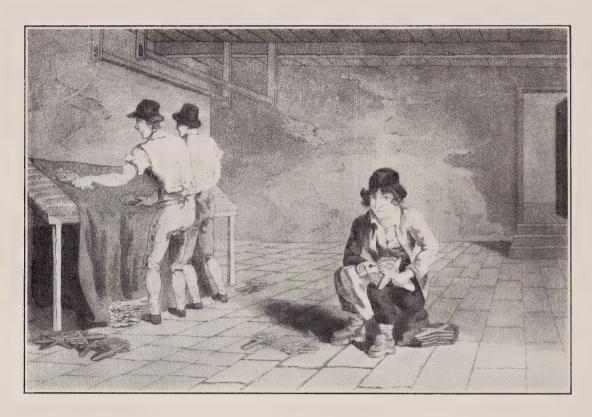
The second process was 'milling,' performed by the fallers. The object was to thicken the cloth and felt the fibres together, until the threads could no longer be distinguished on the surface. The cloth was milled in a soap solution, so that there was a considerable consumption of soap in the process, and the piece was still further cleansed, and was then washed in running water. To quote the words of the note-book: "the Piece is then thrown in cuttle on a Horsetree to sipe." The phrase may be left for the ordinary reader to puzzle out for himself; the manufacturer will probably know what it means, even if he does not still use quite the same blend of technical and dialect expressions.

It is characteristic of Gott that he equipped his mill with several stocks of the West of England pattern. These came from a maker, F. Wheeler by name, at Road in Somerset, a little village on the Wiltshire border, a few miles from Trowbridge. There is an interesting letter from him [No. 27] relative to the despatch of a Stock and Harness in May, 1793. Evidently Gott had suggested that it might be sent from Bristol to Hull by sea; but Wheeler, after enquiry in Bristol, wrote: "there is no Vessle passes scarce once a year from Bristol to Hull, it will be taken to Stourport, how near you I know not."

Stourport is rather a long way from Leeds, but it and its neighbour, Bewdley, marked the limit of river-traffic up the Severn, or rather served as entrepôts. Mr. Stanley Baldwin, when receiving the freedom of his native town a few years ago, recalled the days

<sup>&</sup>lt;sup>1</sup> Details of the preparation of the scouring liquor are given in the Notebook, f. 74.





THE PREEMER BOY

After Walker



The Cloth Dresser or Cropper After Walker

when Bewdley was "a port of Manchester," where the horse-borne packs out of Lancashire were transferred to vessels for Bristol. By this time, perhaps, Stourport had begun to displace Bewdley, for it was now at the mouth of a new canal which gave continuous water-carriage from the Severn to the Trent, either by the Grand Trunk, or by Birmingham. So goods from Boulton & Watt were all sent by water to Gainsborough [see Nos. 31 and 48], and thence by the Ouse and the Aire and Calder Navigation to Leeds; and this was the route by which the stock was sent from Bristol.

A page in the note-book (f. 78) shows that twenty years later Gott was again obtaining stocks from Wheeler. It is headed "Wheeler's Calculation for making Milling Stocks, Septr, 1813," and relates to one or more new ones just put in—"The two large Stocks are calculated to mill from 46 to 47 yards"...." the small stock which he has just put up [is] calculated for milling 36 yds...." "In the West of England the Stock feet make 46–7 strokes per minute—at Bean Ing and thro' the whole of Yorkshire they make about 37—B.I. sometimes only 36."

The miller, whether of corn or cloth, followed a solitary occupation. He was like the ploughman, the master of a craft that claimed lonely service, and the stock, like the plough, simple as it looked, was an implement perfectly adapted by age-long experience to the work it had to perform. It might be harnessed to the steam engine instead of the water-wheel, it might be set up in new surroundings, but no ingenuity could supplant the stock, or dispense with the skilled service of the fulling miller. How much he accomplished by such simple means can be realised when it is seen that only eight "millers and stockers" were needed at Bean Ing to perform the function of the ancient "mill" in Gott's organization of a factory. Over four hundred workpeople were engaged in scribbling and spinning the wool and weaving it into cloth; another two hundred were occupied in the finishing processes² after it had left the "mill," but eight millers sufficed to pass the pieces through the stocks

The head miller, though he had ceased to be his own master, retained a position of some independence. Rogerson sets out the terms of a new agreement with his miller under date of March 15th, 1811. By this he was only to receive "benefit of soap, flocks,

<sup>&</sup>lt;sup>1</sup> The statement refers to falling stocks, as shown on f. 67 of the note-book.

<sup>&</sup>lt;sup>2</sup> The number engaged in finishing is not strictly comparative, for the firm, as merchants, were also buying cloth and finishing it,

and 10/6 each week," and was to find "all men to work the stocks." Presumably he counted upon perquisites from the customers of the mill to supplement his wages. Gott's practice is revealed in a loose sheet of rules relative to the factory organization, though of uncertain date. "The plan of paying the Miller at A.M. is better than at B.I."—at the former he is paid a fixed price for each stockful and hires the men under him—at B.I. all the men are paid with the overlooker, who has 6/- a week extra for his trouble—the men consequently feel that they are as much interested as he and cease to look upon him as their master."

#### THE CROPPING SHOPS.

Normally the cloth had at this stage changed hands and been sold by the clothier to the merchant, who then arranged for it to be finished or dressed, more or less under his own supervision. This was therefore done close at hand in the town of Leeds, which contained numerous cropping shops where master croppers employed journeymen and apprentices in carrying out the various processes of finishing—principally raising, cropping or shearing, and then burling, fine-drawing, and pressing the cloth.

As a merchant would naturally put out his cloth to the same croppers as long as it was finished to his satisfaction it was an easy step to enter into a loose form of partnership with a master cropper. Such an alliance is suggested by the following advertisement<sup>2</sup> as early as 1739:

To be Lett, from May-Day. A House in Meadow-lane, Leeds, now occupied by Messieurs Hunter & Tidswell, with very good conveniences for two Families, a Merchant & Cloth Dresser, a good Garden and large Warehouse, two Dressing Shops, a Garth and three Pair of Tenters.

It is likely that there was some such loose alliance between the firm of Wormald, Fountaine & Gott and one or more cropping shops in the vicinity of their warehouses at Burley Bar, prior to the building of Bean Ing, but there is no direct evidence of it. Whether that was so or not, the inclusion of dressing shops in the organization of Bean Ing in 1792 was not so great a break with custom as for merchants to become manufacturers and scribbling millers. The probability is that the master croppers, who had already been working for the firm around Burley Bar, agreed to

<sup>&</sup>lt;sup>1</sup> A.M.—Armley Mill; B.I.—Bean Ing.

<sup>&</sup>lt;sup>2</sup> Leeds Mercury, March 6, 1738-9; Thoresby Soc., Misc. xxvi.

transfer themselves and their men to Bean Ing on terms that involved absorption into the firm. There is, at least, no trace of their survival as independent units like the manufacturers.

Yet, doubtless, Gott anticipated new developments and dreamt of the early application of power and machinery to the finishing processes to replace the traditional slow and laborious hand methods of the cropping shops. At least one new machine, the gig-mill, had been in use in Huddersfield for raising such cloths as were being made and finished in Leeds, from the time that Gott became a partner in the firm. No one had yet introduced it into Leeds, but the merchants had just decided that the time was come to make trial of any and all of the new inventions to expedite the dressing processes. This much is certain from a remarkable manifesto, issued as a broadsheet by the Cloth-Merchants of Leeds in November, 1791. It is printed below [see No. 156] in full from a copy, possibly the sole surviving copy, now in the possession of the Thoresby Society.

The manifesto breathes the very spirit of resolute determination to make trial of every proposed improvement in cloth-dressing, and to maintain the trade of Leeds against all competitors at home and abroad. The opening paragraph admits the fact that new "machines are already made and set to work in different parts of this County," but it mentions no machine by name. The proposal to set up a joint experimental station for testing the "different machines" under working conditions before they were brought into general use is so novel that it can only have originated in the fertile brain of Benjamin Gott. But such vision was a century too early to come to fruition. Lastly, there is an attempt to placate the opposition of the croppers by a promise of preference, if labour should be displaced temporarily by the introduction of new machinery.

So far from proving to be the herald of a new era, the manifesto failed to accomplish anything—or so it appears. The resolution of the merchants was countered by the stubbornness of the croppers. Even the sturdy individualism of Gott did not succeed any better in his own cropping shops. Once, in 1803, he found himself in antagonism to his croppers, not, indeed, on the question of new machinery, but of apprenticeship, and he had to admit defeat. The episode of the Bramah press that is prominent in the correspondence of 1801–2 can bear a different aspect from Gott's interpretation, and his failure to use the press can be attributed with practical

certainty to the hostility of the men.¹ Nor is it possible to admit that Gott succeeded in introducing either the gig-mill or the shearing-frame—the two new machines in the finishing trade—into his cropping shops until after 1820. For a quarter of a century after the manifesto the traditional hand methods of dressing cloth remained supreme at Bean Ing as elsewhere in Leeds. There were one or two sporadic attempts to use the gig-mill in the town, and each provoked violence and destruction. The only possible conclusion is that the organization of the croppers in Leeds was too strong to permit the introduction of the new machines.

Before considering the gig-mill and shearing-frames and the disturbances provoked by their introduction it will be advisable to look at the old methods of dressing cloth that continued in use at Bean Ing and in Leeds generally throughout the period.

There were essentially two operations, first, that of raising the nap by means of teasels, and then the cropping of it by the shears. These were repeated and alternated and the cloth treated either when wet or dry, according to its quality, so that much time and labour were consumed before the cloth was ready for the burling chamber. The note-book summarises these processes on f. 2, and then describes in detail (ff. 51-54) the treatment undergone by various qualities of cloth.<sup>2</sup>

Certain obscurities call for some comment by way of explanation. The list of processes is given as (19) Witting and Raising, (20) Cropping, (21) Moising, (22) Drying, (23) Shearing, and (24) Brushing. There are here two very obscure terms, viz., witting and moising. The first has not been found elsewhere and it must be a mistake for "wetting": but the second is used in the description of cloth dressing given by a witness at the Enquiry of 1806, and it is to be found in the Oxford English Dictionary as "moze." The earliest quotation there spells the word as in the note-book. The next, from a Proclamation of 1633, shows that gig-mills, though forbidden by law, were being then used "under the name of mosing Mills." At Bean Ing moising meant raising in one direction only, from one end to the other without reversing the cloth, and that only after the first cropping. This corresponds with the last quotation in the O.E.D., where the word appears as "mozing," done by the gig-

<sup>&</sup>lt;sup>1</sup> See p. 49 for Hirst's explanation. <sup>2</sup> See p. 301.

<sup>3</sup> York Corp. Minutes, 1505-6: "To crop and moise every such clothe."

<sup>4 &</sup>quot;The wool of all cloth in the raising is turned after every thro, when moised always the same way," f. 53.

5 Enc. Brit., Ed. 7, 1842.

mill, though the name, even in Gott's time, related to the hand process. As 'moising' was 'raising,' with a technical difference, so also was 'shearing' in comparison with 'cropping.' When the cloth was cut wet for the first time it was cropped; when cut again, after being dried, it was sheared.

John Tate, the witness who spoke of "mossing" cloth before the Committee of 1806, was a cloth dresser from Halifax. His description of the processes is so nearly parallel to the note-book that his replies are worth quoting to show his use of the word, and of an allied expression—'rowing with cards.'

"The cloth dresser first raises the cloth, after that it is cropped wet; it is then taken and mossed and rowed. Mossing is filling up the bottom of the wool after it has been cut with the shears wet, it is done with a handle set with teazles in each hand; after that it is rowed and tentered, after it has been mossed quite wet and rowed down with cards, *i.e.*, to make the wool lie close; after that it is tentered and dried. If a fine piece it will receive three cuts dry after the tenter; when that is done it is backed, *i.e.*, the wool cut off the back side; after that it is burled..."

The first fact that it will be well to select from this confused technical description is that both raising and mossing were done with a tool called a handle which was "set with teazles." The name has already been noted in the Pawson inventory of 1576, and the tool is still to be seen in a few museums.2 It is also shown well in Walker's plate of 'The Preemer Boy.' The handle consisted of a small cross of wood, held by the shaft, with the teasels packed together in two or more rows above the cross-bar. This consisted of two parallel strips that held between them the stems of the teasel heads. These were kept in position by a string carried round them from one end of the cross-bar to the other. The setting, otherwise the selection and fixing of the teasels in the handle, was a little art in itself. In Gott's cropping shops there was one "Handle Setter" with two boys to assist him; and, as already noted, there were five "Premajers," or preemer boys employed in cleaning the handles after use.

¹ The use of so common a word in a special technical sense is apparently the reason why it has been overlooked. Neither the Oxford English Dictionary nor the English Dialect Dictionary takes note of this meaning, though the tool must have been in continuous use in the industry under this name for at least four centuries. It is to be found in wills from the sixteenth century onwards, and in Scotland occurs in 1681 ("for setting and dighting of handles") in The Records of the New Mills Cloth Factory, 1681–1703, S.H.S., 1905. The "handle brake" of various Halifax inventories is a derivative that is not yet explained.

<sup>&</sup>lt;sup>2</sup> Textile Museum, University of Leeds; Bankfield Museum, Halifax.

Actually the note-book does not use the name 'handle,' but speaks of the raising and moising on the 'board' as being done with teasels. At a later stage the cloth was "struck thro with flatter cards at the Perch." This is clearly the same process as Tate's "rowed down with cards," and according to him its object was "to make the wool lie close." The perch or 'peark' was the bar or frame on which the cloth was hung or fixed in a vertical position for rowing, and also for examination by the burlers and finedrawers. At Huddersfield, according to witnesses at the Enquiry of 1806, the perch had been replaced by the "nelly," with a roller at the top and bottom, and this had then been in use for forty years. There is one now to be seen in the Tolson Museum, Huddersfield, and with it the old pair of cards used for the rowing. It is an instructive exhibit, for it clears away all the uncertainty and explains the distinction drawn by both the note-book and Tate. These cards are similar to those used in the early stage of carding wool in that they are wire brushes. But they are not identical; probably the iron teeth are not bent, and the tool is a different shape. The "card" is mounted on a wood base, about  $7\frac{1}{2}$  by 3 inches, and attached to this is a handle, about  $5\frac{1}{2}$  inches long. As the teeth or wires are pointed and not hooked like the teasels the action of the cards must have been quite different, more akin to a brushing of the cloth, as suggested by Tate's explanation.<sup>2</sup>

The croppers' shears were a large, ponderous instrument, that looks as if it demanded both strength and skill to wield it. The steel blades, twenty to twenty-four inches in length, were joined by a long, spring bow-handle, so that the whole measured four or five feet and weighed perhaps thirty-five pounds. It was like no other cutting instrument whatever, for the blades, instead of being flat, were curved into an arc and the upper blade was set to make an angle of about 70 degrees with the lower one. Seen in a museum a pair of shears seems to be the gigantic tool of some legendary craftsman, only to be wielded by its master, nor does the museum reveal the secret of its use. It is not practicable even to close the

<sup>&</sup>lt;sup>1</sup> Compare the prohibition in the Act, 3 Henry VIII, c. 6 (1511–12)—" The Walker...shall not rowe nor werke any Clothe or Webbe with any Cardes."

<sup>&</sup>lt;sup>2</sup> Though the gig is still used for raising cloth, it has been entirely replaced for many kinds of cloth by card-raising machines in which sharp, bent wires mounted on cards take the place of teazles. The most successful type of machine, first patented in this country in 1885, is known as the Moser, a name that suggests that the machine retained the old name discussed above and was intended to moze or moss the cloth. But it is not so. The Moser machine derives its name from that of its inventor—C. E. Moser.

blades with any reasonable effort, let alone to cut with them with rapidity.

The secret lay in a device, little more than a makeshift, attached to the shears, that put at the command of the cropper the mechanical advantage of a lever, and enabled him to close the blades by pressing on the lever. This, called either a 'gig' or a 'nog', was fitted to the outer edge of the upper blade, just about its junction with the handle. It was only held in position, nearly upright, by being tied near its lower end with a short loop of cord to a block of wood that was clamped to the lower blade. When the lever was depressed the upper blade was pushed inwards sufficiently to bring it into contact with the lower one throughout its length; when released, the blades opened again.1

The cloth to be cut was laid across the shear-board, which was supported on low stools and was of such a breadth as corresponded with the shears in use. It was padded so as to form a soft cushion and was rounded to fit the curve of the blade.2 To increase the pressure of the shears upon the nap of the cloth heart-shaped leaden weights were placed upon the lower blade. The cloth was cut across its breadth from list to list, and for 'broad' cloth two croppers worked side by side, one beginning at the left hand list and the other in the middle. Standing opposite the 'gig' they gripped the bow firmly with one hand and depressed the gig with the other. As each cut or 'board' was completed the cloth was moved forward, dropping in cuttle on the floor, and another breadth was fixed on the board.

## GIG-MILL AND SHEARING-FRAME.

The gig-mill and shearing-frame were in themselves quite simple mechanisms, devised to adapt these two tools to water power. Anything that revolved might be called a gig, and the gig-mill

<sup>1</sup> The description of this mechanism is based upon that in Rees' Cyclodia. There was a third loose attachment described as follows:—" To hold the shears by, a short staff is lashed to the bow of the shears, and sehold the shears by, a short staff is lashed to the bow of the shears, and secured by a stay to the lower blade; its direction is nearly parallel to the back edge of the upper blade. The workman puts his arm through the bow as far as the elbow-point, then lays the fore-arm flat against the staff, which he grasps with the hand; and in this way he has a great command of the shears, leaving the right-hand at liberty to work the handle...."

A set of these three wooden fittings is preserved at the Tolson Museum, Huddersfield; but they have not yet been fixed in position on the shears as no specified by found in the town with a knowledge of their use. Thirty years

one could be found in the town with a knowledge of their use. Thirty years ago old croppers were living who had used the shears, but now their craft is

<sup>2</sup> Walker's plate, here reproduced, shows a flat board and straight shears, but its accuracy on this point is open to question.

used for raising cloth consisted of a revolving drum with rows of teasels set in a dozen parallel holders or frames along its surface. The cloth was made to pass over the surface of the drum by means of two rollers, on and off which it was wound. At first these rollers had to be exchanged when the whole piece had been wound on to one of them. The illustration from Rees' Cyclopædia shows an improved pattern, in which only one roller was engaged at a time and the direction was reversed by engaging the other. But by the date of publication (1819) "the most improved gig-mills used in Yorkshire" had made the motion continuous by sewing the ends of the cloth together and drawing it through a pair of rollers (at L), and then passing it over others suspended from the ceiling.

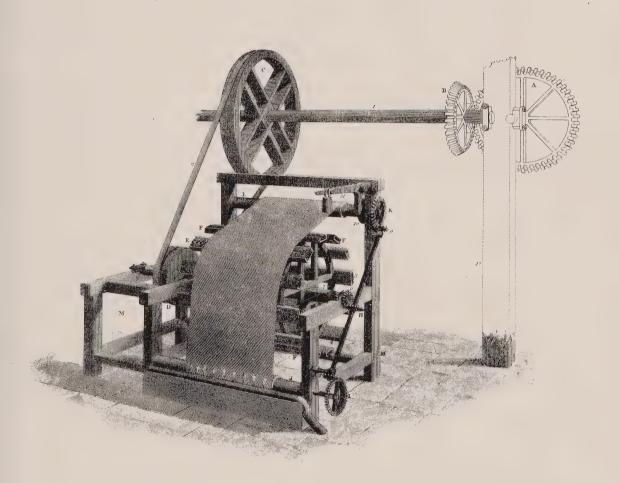
The shearing-frame was even more elementary, for it was not rotary; the mowing-machine device only came later.¹ The hand-cropper's shears, quite unaltered, were mounted on a wooden frame or carriage running on wheels. "At the side of the table or cushion on which the cloth is spread a long stool is placed, having grooves at the edges to guide the wheels of a carriage to which the shears are affixed by their bows. There is a carriage for each pair of shears, and they are slowly and gradually moved along the stool by a cord which winds upon a roller turned by wheel-work; and at the same time the handles of the shears are continually pulled by a cord connected with a small crank which turns round very rapidly."² The crank, coupled as it was to the same 'gig' lever as the cropper had used, produced an up and down motion of the lever so that the shears opened and closed alternately.

The frame produced no other modification of the routine of the hand cropper, except that one man sufficed to work the two pairs of shears. When the cut had been made he had to bring the frame back clear of the cloth, place another breadth of this on the board and pin it in position, set the frame into position again and start the cutting of another 'board.'

These details have been given because both the method of operating the old hand-shears and the construction of the shearing-frames have become exceedingly obscure. Rees gives no illustration of the frame as used in Yorkshire, but only of a 'perpetual shearing-machine' used in the West of England, different in many respects though similar in the mechanism by which the power was

<sup>&</sup>lt;sup>1</sup> The first patent for a rotary machine was granted to Mr. Price of Stroud in 1815. The first successful one in the Yorkshire industry was the Lewis Cross Cut machine.

<sup>&</sup>lt;sup>2</sup> Rees' Cyclopædia, xxxviii, Woollen Manufacture.



GIG-MILL, 1815

After Rees



applied to the gig or lever. But he states that a patent was granted to Mr. Harmar of Sheffield in 1787, and another in 1794, for the frame that came into use in the West Riding, adding, "at one time his machines were in general use, but the present shearing-frames, although of the same kind, are very much simplified." It is known that most of the frames in the Huddersfield district that were broken during the Luddite Riots of 1812 had been made by Enoch and James Taylor, who were originally blacksmiths at Marsden.

Two contemporary drawings show the interior of a cropping shop before the introduction of these machines. The one in Walker's *Costume of Yorkshire* is reproduced here; the other shows in more detail the shop of Starkey Bros. at Longroyd Bridge, Huddersfield, notorious as a hot-bed of Luddism.

The Luddite Riots of 1812 were a hostile and violent demonstration against the use of machinery, and in the West Riding of gig-mills and shearing-frames in particular. They centred in the Huddersfield district,<sup>2</sup> where they were fomented in the cropping shops, and the cloth-dressers were almost the sole participants in them. It is not necessary here to look for the deeper causes of this wild outbreak, but some of them are apparent in Rogerson's Diary. The year opened with bank failures, bringing further bankruptcies and distress in their train, whilst wheat soared to famine prices. The industry was under a cloud and unemployment widespread owing to the closing of the American ports to British goods. Whilst the cloth-dressers were destroying the machines that appeared to be robbing them of their livelihood, the merchants were agitating

¹ The patents granted to Jno. Harmar, clerk, of Sheffield, No. 1,595 in 1787 and No. 1,982 in 1794, were similar, and were for a machine designed both "for Raising a Shag on all sorts of Woollen Cloths, and Cropping or Shearing them." It was a complicated affair, as Rees suggests, but the cropping part was similar in its main ideas to the shearing-frame as described above, in so far as it took the croppers' shears and operated them by a crank coupled to "their bobs or levers." There was also the carriage or frame independent of the shear-board, but the elaborate 'harness' to hold the blades proved to be unnecessary. It is likely that the actual frames in use, made by black-smiths and broken during the Riots by sledge-hammers, were largely built of iron. "Enoch hath made them and Enoch shall break them" ran the Luddite chant in allusion to the Marsden blacksmith and his sledge-hammer.

<sup>&</sup>lt;sup>2</sup> The *Shirley* country lies midway between Huddersfield and Leeds. The night attack on 'Hollow's Mill' is founded on the attempt to break into Cartwright's mill at Rawfolds, near Cleckheaton, on April 11th, 1812. But Charlotte Brontë transferred the riot to another mill two miles higher up the Spen Valley at Hunsworth. As Hiram Yorke is a picture of Joshua Taylor, the owner of Hunsworth mill, so does 'Hollow's Mill' correspond to the little old scribbling mill there. The attack was planned in Huddersfield.

for the repeal or withdrawal of the Orders in Council, which had robbed them of their chief foreign market.

It is necessary, however, to enquire how it came about that the Leeds industry avoided being drawn into the whirlpool of Luddism, and to justify the answer that it was because neither gig-mill nor shearing-frame was to be found in the district. If not absolutely true this is very near the mark, in spite of the determination of the merchants twenty years earlier to apply machinery and power to cloth-dressing.

The cloth-dressers of the West Riding had set their faces against the wider use of gig-mills and the introduction of shearing-frames about the beginning of the century. Their trade-union, the 'institution,' even if not legal in itself, used constitutional methods to promote their aims and petitioned Parliament, amongst other things, to enforce the ancient statute prohibiting the use of 'gig-mills.' The Committee of 1806 consequently examined a good many cloth-dressers upon four points, viz., their membership of the 'institution,' the value of apprenticeship, their experience of gig-mills and of shearing-frames. It elicited the facts that these men, drawn wholly from Huddersfield and Halifax, had worked for firms there who used one or other machine, or both; that Atkinsons of Bradley Mills, Huddersfield, had used the gig-mill from 1783 or 1784 and set up shearing-frames about 1800, though they scarcely used them before 1803; that Brookes of Honley were using both, as were one or two other firms; whilst in Halifax the gig-mill had been in general use—at least for some goods—for half a century. Further, William Cookson, a prominent Leeds merchant, admitted that he sent large quantities of cloth to be gig-dressed at Halifax and Huddersfield.

Not a single cloth-dresser was called from the Leeds district to give evidence of the use of these machines, though one, examined incidentally, stated that his only experience of the gig-mill had been gained in his youth at Atkinsons of Huddersfield. The only inference to be drawn from the *Report* must be that neither machine had come into use in the Leeds industry.

Yet it is probable that there had been more than one attempt to introduce the gig-mill. There is evidence of one, for the *Leeds Mercury* of November 25, 1799, quoting from an advertisement offering a reward in the same issue, announced: "On Monday night a most daring and outrageous riot took place at Cross-Flats, Beeston, near this town, and a mill used for the raising of cloth,

by Messrs. Johnson of Holbeck, was pulled down and totally destroyed."

Nothing further has come to light until the time of the Luddite Riots. The first incident reported to the magistrates was an alleged "conspiracy to destroy the Machinery of certain Mills in this town and neighbourhood, employed in the dressing of Cloth." They went in a body to the Bridge and found there a number of persons, "many of them with their faces blacked," who fled at their approach. One was taken into custody and committed the next day to York Castle, "under what is called the Black Act, charged with disguising his person and having in his possession several offensive weapons, we believe a hammer and chissel; he was escorted to the Castle by a party of the Scots Greys stationed in this town." However, the Grand Jury threw out the Bill when he came up for trial on the ground that he was not armed.

A few days later there was more ground for alarm, for on Sunday night (January 19) "the Gig Mill of Messrs Oates, Wood & Smithson, at Oatlands near Woodhouse-Carr, was discovered to be on fire.... the damages are estimated at about £500....no doubt remains but the fire was lighted by the hand of an incendiary." Commenting on this, the paper referred to the destruction "about thirteen years ago" of a mill used for the same purpose at Holbeck. This appears to be the one mentioned above.

There were more alarms, though apparently only one more outrage in Leeds, but the magistrates and merchants appear to have got into a state of panic as events developed elsewhere. A reward of a hundred guineas offered by the Insurance Office was soon supplemented by an equal sum from Whitehall, on representation to his Royal Highness the Prince Regent of the circumstances of the fire at the "Dressing Shops & Warehouses" at Oatlands. This offer was followed by one of £500 by the "Merchants and Manufacturers of Leeds," and by the end of March it had been raised to £1,000, because on the 24th "several Persons entered the Mill of Mess<sup>rs</sup> W<sup>m</sup> Thompson & Brothers, of Rawdon and destroyed the Shears and Machinery therein." A night or two later "the finishing shops of Mess<sup>rs</sup> Dickinson, Carr & Shann in this town were entered and eighteen pieces of fine cloth, dressed by machinery, torn and cut into shreds."<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Leeds Mercury, Jan. 18th, 1812. <sup>2</sup> Ibid., January 25th.

<sup>3</sup> Ibid., March 28th.

That appears to be the end of the disturbances in Leeds,<sup>1</sup> and the cause of their insignificance seems to have been the absence of gig-mills and shearing-frames from the district. It would be rash to claim that no more firms had introduced them than the couple or so named above, but it does not seem likely that half-adozen Leeds merchants had put any gig-mills into their cropping shops by 1812, and not one had brought the shearing-frame into use.

This conclusion is strongly supported by the evidence of the note-book, which proves, so far as a negative can be proved, that neither machine was in use in the cropping shops at Bean Ing; and the book was largely a record of machinery and processes there between the years 1812 and 1815. It is true that Gott's own note on the distribution of power from the steam engine, dated July, 1796, provided '½ Horse' for the "Indigo Mill, Winch, and Napping and brushing engines" [No. 63]. The alternative version names the 'Indigo Mill, Frizing Mill, &c.' A later schedule in the notebook grouped together "Shafts and Brushing Mill, Indigo [mill] and Pumps"; and there is no further allusion to a napping engine. There are, however, several references to the use of the brushing mill in the descriptions of the finishing [f. 54], and it appears to have been the only machine driven by power in the cropping shops up to 1820 or thereabouts.

But beyond the evidence of the Gott Papers there is independent and conclusive proof that the gig-mill was not in use at Bean Ing in 1810 or even later. This is to be found in the story of William Hirst, whose rapid rise to fame and fortune in the Leeds industry and sudden collapse were comprised with the decade 1815–25.

William Hirst, on his own showing, and his claim is not disputed, was the one man who taught the Leeds industry to apply the gigmill successfully to the local makes so as to produce superfine cloths equal to the best from the West of England. His meteoric career ended in a financial crash in 1825, and twenty years later Hirst told the story of it in a little volume with a big title.<sup>2</sup>

Hirst was born in Huddersfield in 1777 and was apprenticed to

<sup>&</sup>lt;sup>1</sup> Two letters or proclamations purporting to be issued by General Ludd, Commander, or General of the Army of Redressers, have been preserved amongst the Gott Papers and are reprinted below. See No. 75. A third one came from an admirer of Gott and was written to warn him of the threats upon his life, and to promise him protection. See No. 76.

<sup>&</sup>lt;sup>2</sup> History of the Woollen Trade for the last Sixty Years, commencing with a Memoir of the Author; and tracing his connexion with the progress of the Woollen Manufacture. By Wm. Hirst, Leeds, 1844.

a cloth-finisher there, and after a brief experience as a journeyman cropper he came to Leeds and Bean Ing about the turn of the century. It was in 1801 that Gott bought a Bramah Press with the intention of using it in place of the screw-presses, and Hirst's pithy comment on its fate seems to be much nearer the mark, and to show a truer knowledge of the character of croppers than Gott's philosophical and hypothetical disquisition addressed to Bramah [see No. 70]. His account of the incident is as follows:

"It is now about forty years since I worked at Mr Gott's as a cropper. While I was there he purchased one of Bramma's hydraulic presses, but none of the men could or would work it, and

it was laid aside for fifteen years.

"When I began my factory in School Close in 1816 Mess<sup>rs</sup> Fenton, Murray & Co told me that if I would use the hydraulic presses they would let me have them at almost any price as they wanted to get them into the hands of some party who could bring them into operation so as to give them a fair chance. The result was as they expected; as soon as it became known how well they worked they were soon brought into general use. Mr Gott had his brought into operation, and very soon added others, for they were found to be the best and most powerful presses that had been constructed....

"The workmen at that time had a very foolish objection to the introduction of any kind of new machinery, and they thought even the hydraulic press might injure labour; and consequently they would render as little assistance as possible in working them."

After a few years as a journeyman Hirst started as a master-cropper with two partners. Presently, under the encouragement of a firm of merchants, Charles and Marmaduke Gray of St. James' St., he built a dressing shop on an adjoining site in Cankerwell Lane. Probably the advertisement of Sept. 30, 1809 [No. 186], fixes the date when he vacated these premises (which the Grays had bought) to enter new cropping and weaving shops in St. James' St. He there began his career as manufacturer and merchant.

His experience as such soon caused him to be dissatisfied with the quality of Leeds superfine cloths. "Although my goods were costing me ten per cent. for wages in the finishing department alone I could not bring them to bear a comparison with those manufactured in the West of England," where they were gig-dressed. He had not then even seen a gig, but his opportunity came "about the year 1813," when a friend showed him the gigs at work in Oatlands Mill.

"I had not been in the place more than five minutes before I saw what was wanted to make them answer for Yorkshire fine goods...." (p. 15).

"I was not the first who introduced gigs, but I was the first who made cloth suitable for gig-razing. The ordinary fabric made at that time was always worse for being finished by machinery than

if it had been done by hand.

"I now set about making goods suitable for gig-finishing, and I agreed with Mr Oates of Oatlands Mill, to finish them for me at eighteen pence per yard; myself, or some other person whom I should appoint, to superintend the finishing.... Having thus the whole management of my goods under my own care, I was enabled, in a month or two, to produce cloth of a perfectly different style to any which had been previously made in Yorkshire" (pp. 16, 17).

The arrangement with Oatlands Mill did not last long. In 1815 Hirst was building a new mill in School Close, Mill Hill, and he writes "I razed the first piece of cloth in my new mill in April, 1816." But the croppers were still bitterly opposed to the use of the gig-mill and he kept ten armed men every night to guard the premises. He adds: "I never ventured out at night; and even when I went out at day time, I always had a brace of loaded pistols in my pocket."

It is not a pleasant note on which to finish the story of the introduction of the gig-mill, but it does illustrate the indomitable pluck and determination of the ex-cropper, and it does reveal the cause for the long delay in the introduction of the gig-mill into the Leeds industry. If the geographical position of Leeds, its relative remoteness from Lancashire, is the primary explanation of the later arrival here as compared with Huddersfield, of the machinery born of the cotton industry, the greater resistance and more powerful organization of the Leeds croppers appears to be the chief cause in delaying the advent of machinery in the finishing trade.

In weighing up Hirst's claims some deduction must be made for his self-esteem, for his absorption in his own achievements. He is rather apt to confuse Leeds with Yorkshire, and in proclaiming aloud what he has done for the Leeds industry to lose sight of the established reputation of other districts. Leeds was not then making

A recent improvement, noted in 1819 and producing a cloth suitable for gig-dressing, can hardly be attributed to anyone but Hirst in the light of his

own remarks.

¹ Nowhere does Hirst drop a hint as to the nature of his improvements which made cloth suitable to be raised by gig-mills. The secret is probably revealed in a passage in Rees' Cyclopædia in the description of Fulling. "In the best manufactured cloths the separate threads can scarcely be distinguished, the bottom of the cloth appearing to form one even, continuous substance. An improvement in this respect has recently been made at Leeds, by spinning the wool much softer and thicker than has usually been the practice, and uniting the threads in the fulling mill, and then working the substance of the cloth down to a requisite degree of thinness by the gig-mill.'

the highest quality of superfine cloth. A very capable description of the industry in the Huddersfield district, written as early as 1795,1 stated that "the finest broads in Yorkshire are made at Saddleworth "; and again of the same district: " many of the superfine broads made here vie with those of the West of England." Ten years later the Report of 1806 makes it perfectly clear that John Brooke & Sons of Honley, to name only one Huddersfield firm, had then an established reputation for the high quality of their machine-dressed superfine cloths. The fact is that in the Huddersfield trade there were firms who had solved the problem of the use of the gig-mill (and of the shearing-frame as well) years before Hirst succeeded in Leeds. His warmest admirers, as his narrative shows, were in Saddleworth, and his success here stimulated the further use of the gig-mill there simply because the manufacturers were in exactly the same line, the superfine trade, as that in which Hirst had won his fame.

## THE CLOTHS.

What of the cloth made at Bean Ing, or in Leeds, during this period? Many strange names appear in Rogerson's Diary and the Hopps Letters that can mean little or nothing to a reader to-day. Many makes of cloth have had their vogue and passed out of knowledge since that time; but the cloths made in Leeds in the early years of the nineteenth century might all be seen in the Great Exhibition of '51, and certainly the broadcloth, which was the ancient staple product of the Leeds woollen industry.

In Gott's time manufacturing was simplicity itself compared with the complexity of to-day and the art of woollen weaving remained essentially medieval. Designers were unknown and pattern almost non-existent. Yet there was a stirring of the stagnant waters. The exuberant ingenuity of the youthful cotton industry was both a challenge and an inspiration to the woollen industry. Calico-printing brought colour and pattern, whilst new devices in weaving stimulated design. There were also possibilities in combining the new fibre with wool, especially in using the stronger cotton warp. Hence new kinds of woollen cloth began to make their appearance, and Gott took a share for some years in their production, though the manufacture of 'fancy' cloths hardly took root in Leeds as at Huddersfield.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> In Aikin's History of the Country round Manchester.

<sup>&</sup>lt;sup>2</sup> "Factories....are better adapted to the manufacture of fancy goods, of which immense quantities and great varieties have been invented and sold of late years," *Report* of 1806.

The older Leeds broadcloth, whether common or superfine, was a plain-woven cloth, dyed black or a uniform colour, and the dressing of it was all-important. When the First Gentleman in Europe visited Leeds in 1806 and declared that he would wear with pride the beautiful specimens of cloth manufactured at Bean Ing that he had accepted from the firm, and when, as George IV, he bought at five pounds a yard a whole piece of superfine cloth that William Hirst had made from specially selected wool as a challenge to the world, these samples of Leeds manufacture would be plain, smooth-faced cloths, made from the choicest wools of Saxony or Spain, dyed some fashionable colour and finished with all the skill that Gott and Hirst could command.

What these colours were may be gleaned from some of the orders for home or abroad reported by Hopps, and in more detail, with samples of cloth and the dyehouse recipes, from the Pattern Book begun by William Gott in August, 1815, when, doubtless, he was learning the business and in that year passing through the dyehouse. There is a description of the preparation of the indigo vat—the acme of the dyer's art—with woad, indigo and madder, for the blue and black dyeing. The colours of coatings and cloths for men's wear are such as grass green and bottle green, drab, olive, puce, or claret, with more vivid scarlet or light blue for a waist-coat—all suggestive of the costumes of the Regency, though still to be cut and adorned by the tailor.

Such was the staple output of the Leeds industry, admittedly a coarse, cheap cloth if made wholly from native wool, but ranging up to a good or even superfine quality when Spanish wool replaced English more or less. It was beginning to encounter the competition of newer makes that had something besides colour and finish to recommend them, but it retained its market and was always an important product at Bean Ing. A somewhat surprising proof of this is to be found as late as 1851, when the Catalogue of the Great Exhibition shows that Benjamin Gott & Sons displayed only woollen cloths in various plain colours and in three groups: (a) for the home trade—brown, olive and blue and black-woaded; (b) for the American market—brown, green, olive, bottle, etc.; (c) for the Chinese market—scarlet, salmon, black, etc.

¹ Hirst made four pieces of this exceptional quality about 1821 and some of them were sold in America at £7 16s. per yard. The price of his superfines was usually from 20/- to 34/-. Rogerson notes in his Diary, 27 December, 1809, that he "bought a coat[length] of Scarlet Cloth to send off at 40/-per yard, an enormous price but very fine."

The other important products of the firm were army cloth and blankets, the latter for the army (distinguished as 'camps'), the navy, and the American-Indians principally. The manufacture of neither calls for much comment, although no small portion of Gott's energy was absorbed in securing markets for them, in obtaining contracts and overcoming official prejudice against Yorkshire goods. Yet he was bound to triumph by the mere scale of his operations.

More technical interest attaches to the various cloths with stranger names that appear in Rogerson's Diary, in the Hopps Letters and in the Bean Ing note-book. Some of these were manufactured at Bean Ing; others bought from the country clothiers or at Huddersfield were only dyed or finished there. The firm also, as merchants, occasionally supplied their customers abroad with cloths or stuffs, bays from Rochdale for example, that never entered Leeds, and these call for no remark.

The cloths in question were all of recent origin, though when and where they originated is at least obscure. The Leeds Directory for 1798 names one cassimere manufacturer in the town and six cassimere printers. In 1817, after describing the 'establishments' of Benj. Gott & Sons, it states in the next paragraph, "Latterly, a large quantity of fancy articles have been made at Leeds, as Swansdowns, Toilinets, Kerseymeres, and a thick, coarse kind of cloth, called bear-skins." In the 1822 edition a place is found, after the establishments of Gott, for Wm. Hirst and his success "in the manufacture of black and blue superfine cloth" duly noted. A little later comes the statement: "Large quantities of ladies' cloths, which come under the designation of pelisse-cloths and shawls, have lately been made in this neighbourhood."

Here, then, in the *Directory* are set out the names of the newer 'fancy' cloths that late in the eighteenth century were coming into vogue and were being manufactured in and around Leeds and Huddersfield and were challenging the supremacy of the old broadcloth. Rees' *Cyclopædia* (1819) gives a similar list with a useful summary of their distinctive characters. The Bean Ing note-book shows that many of them were being made by Gott, who was probably the first to make some of them in Leeds, though it was at Huddersfield that the 'fancy' trade developed most rapidly.

These 'fancy' cloths fall into three groups, and the differences

are easy to understand, even if the slighter distinctions between one cloth and another in the same group are more obscure.

- I. Thick, shaggy cloths for overcoats appear to be the earliest in date. "Thickcloths with a long pile," states Rees, "called duffields, fearnoughts and bearskins are manufactured on the same principle as blankets, but they are milled much thicker and dyed, and also raised to a deeper pile." Duffels or duffles, as they were more usually called, from Duffel in Brabant, were the oldest make of this type of cloth, but are not much in evidence.¹ Captain Cook clothed his men in fearnought jackets and trowsers. Rogerson's Diary shows that bearskins were being made around Leeds, and they were dyed, if not manufactured, at Bean Ing, and there are samples in William Gott's Pattern Book.
- 2. The outstanding and earliest example of twilled cloths was the cassimere or kerseymere. Its production was the first step in introducing design into woollen fabrics. Its characteristic feature, the twill, was a diagonal rib across the cloth produced by dividing the warp equally so that two threads were above and two below the shuttle as it passed through the shed. It was a narrow cloth, 27 ins. wide, like the old kersey, but had no relation to that. The confusion arose through kersey being always pronounced and often written 'carsey' in Yorkshire, so cassimere (derived from Cashmere) sounded much the same as kerseymere. Aikin's History of the Country..round Manchester, 1795, contains the first reference to kerseymeres as being made at Huddersfield. It is likely that they originated in that district, and equally likely that Gott brought James Mallelieu, who bore a Huddersfield or Saddleworth name, to Leeds to weave cassimeres at Bean Ing.

That cassimeres were 'printed' is indisputable, for in 1798 there were six cassimere printers in Leeds, and the same year Hopps reports an order for 'printed cassimeres' [No. 90]. An advertisement<sup>2</sup> in 1770 shows a dyer introducing roller-printing and watering into Leeds at quite an early date for fabrics that were commonly used for window or bed curtains, and that appear to

<sup>&</sup>lt;sup>1</sup> Four Remnants of Cloth, supposed to be stolen, of which three were Leeds Broad Cloth and the fourth "seven yards of dark Claret or copper colour'd Duffields" were seized at Rochdale. See *Leeds Intelligencer*, Jan. 20, 1784. See also p. 89.

<sup>&</sup>lt;sup>2</sup> William Rhodes, Dyer in Leeds, Begs Leave to acquaint his Friends and the public in General, That he has just set up a Pair of Rollers for the Printing & Watering of Harrateens, Cheneys, Morines &c. which will be compleated as well as in London. He has also engaged a Stover from Coventry for Stoving Worsted and Woollen goods which will be performed as well as at Coventry.—Leeds Intelligencer, October 9, 1770.

have ranged from worsted and woollen to linen. None of these were made at Leeds, so that the town seems to have specialised in the printing of fabrics, including cassimeres, that were made elsewhere. There is no reason to suppose that the printing of cassimeres was attempted at Bean Ing, but probably most cassimeres were either mixtures or were dyed in the piece, and so passed through the dyehouse in the normal way.

Cassimere was a cloth for men's wear, but pelisse-cloths, manufactured at Bean Ing for ladies' wear, and therefore thinner, were also twilled, though perhaps as often woven plain. The Pattern Book contains examples of twilled pelisses, and one of them, on examination, is found to be the 2-and-2 twill. When finished they were undoubtedly very attractive cloths and one of the most successful novelties produced at Bean Ing. The name is derived from the use of the cloth for the long mantle-like pelisse worn for many years. Pellins, named in Rogerson's Diary, were either the same or a similar cloth.

3. Swansdowns and Toilinets were a totally different type of 'fancies,' for they were soft, thick cloths made with a cotton warp and a woollen weft, as Rees states and as is evident from the Bean Ing note-book, which gives the price of the cotton warps [f. 48]. Woollen yarn for the weft was invariably dyed in brilliant colours; samples of pink, salmon 'for fancy waistcoats,' scarlet, light blue and apple-green swansdown yarns are to be found in Wm. Gott's Pattern Book. Both were popular cloths for waistcoats for many years, especially with horsy men—grooms, huntsmen and coachmen. From a German source¹ it appears that toilinets were being woven in both stripes and checks in Yorkshire in 1801. It is a development that might be expected, but scarcely in Leeds, where the industry remained purely a 'one-shuttle' trade.

One or two other fancy cloths remain for notice that come under the class of friezes or frizes. Ratteens, or 'rateens' are

One or two other fancy cloths remain for notice that come under the class of friezes or frizes. Ratteens, or 'rateens' are named at least once in the Note-book as being woven by Mr. Read. They were a thick twilled cloth that was usually friezed. 'Naps' are named occasionally by Hopps and were possibly only finished at Bean Ing. They were cloths subjected to the special process of friezing, or twisting the nap into knots. Gott's scheme for the distribution of the power from the engine in 1796 provided half a horse-power for the 'napping engine,' or the 'frizing mill,' along with the 'brushing engine' and the 'indigo mill' [No. 63].

<sup>1</sup> Nemnich's Waaren Lexicon, 1801, quoted in O.E.D.

These simple revolving machines, called mills, like the gig-mill, were not novelties introduced by Gott. There was a frizing-mill in Leeds sometime before 1792. The reference to the one at Bean Ing in the Note-book is very brief although there is an elaborate description of the preparation of the frizing-board.

Though design was in its infancy the manufacturer had one other resource at his command. By blending wools of different colours, or an undyed wool with a dyed one, something after the style of the pepper-and-salt pattern could be obtained.<sup>2</sup> This device was used chiefly, or only, in the making of cassimeres and pelisses, offering a choice of mixtures as well as plain colours. Hopps, in an early letter [No. 85], reports an enquiry for plain and mixed cassimeres. Later Bean Ing certainly made both cassimeres and pelisses in mixtures as well as plain colours. The Pattern Book has quite a large range of such blends. Black, corbeau or bloom blended with white (undyed) wool produced grey mixtures: olive was blended with orange, bullace with point (=pearl), and green with cinnamon. There are also details of prices and measurements from the raw wool to the finished cloth, and the cassimeres range in price from 2/3 to 6/9 a yard.

The other section of the Pattern Book, with its samples of dyed cloth, does more than supply technical details. Its coatings in bottle-green, its bearskins in olive or drab or logwood blue, its pelisses in claret or mulberry, in scarlet or puce, its bright-coloured swansdowns, recall costumes and fashions that lasted into Victorian days. William Gott's industry has indeed helped to give substance and colour to the picture of cloth making at Bean Ing in the year of Waterloo.

<sup>&</sup>lt;sup>1</sup> See advertisement No. 191. Watson in his *History of Halifax* enumerates four frizing mills on the Halifax brook in 1758.

<sup>&</sup>lt;sup>2</sup> This blending was the primary object of scribbling according to Thoresby [see p. 18]. Similarly P. Lindsay, writing of the Scotch industry in 1733, said "we have but few scribblers who understand the close mixing of wool on the cards for medleys"—Interest of Scotland.

## EPILOGUE: 1820—1830.

Whether Waterloo or the death of George III is chosen to mark the end of the epoch now reviewed hardly matters. It began with the advent of the scribbling mill, the slubbing billy and the spinning jenny. It saw the steam engine utilised to drive the first and a great factory organisation created and consolidated by personal enterprise. At its close the domestic clothier, aided by the scribbling miller, still held his own though factories were multiplying around him.

William Hirst's success as a manufacturer marks the beginning of the next phase, for he it was who broke the opposition of the croppers and applied power to the finishing processes. It is marked equally well and even more definitely by the conversion of the firm of Wormald, Gott & Wormalds into Benjamin Gott & Sons. Practically, Benjamin Gott had finished his life work, and it fell to the next generation to face and solve the new problems. If Hirst led the way in extending the use of power the Gotts soon followed. In 1824 the firm commenced extensions and installed a new 80 h.p. engine to drive gigs for raising cloth, and to relieve the old engine, which was greatly overloaded. It is probable that at the same time power was also applied to the cropping. The time for shearing-frames had gone by and they never found their way into the Leeds industry. Like Hirst, Gotts started with the Lewis Cross-cut machine and, perhaps a little later, a perpetual machine cutting lengthways. The date cannot be fixed exactly, though it seems likely that power was applied simultaneously to the whole of the finishing. Again in 1828-9, there was another expansion; more buildings went up to house spinning mules driven by power. A new mill was built to hold more gigs and another engine was installed. Within the decade, 1820-30, therefore, power had been applied both to spinning and to the finishing processes.

Beyond 1830 this narrative must not go, but there is one document of that year amongst the Gott Papers that will serve to round off the story of Bean Ing, though its date excludes it from publication in this volume. It is another list of the workpeople, similar to that of 1813 but with more detail, for it records the "Average Weekly Earnings, Park Mill, 1830," and groups the workers into Men, Women and Children. Its economic value is clearly great, but beyond a reference to its existence it is only possible here to

use it in a broad comparison with the earlier list. The classification by departments remains much the same as before, but the total number of workpeople has risen nearly 50 per cent., to 1,120, of whom 607 were men, 301 women and 212 children. The high proportion of men is remarkable, but the spinning and weaving as well as the cloth dressing were still entirely in their hands. The women were mainly employed as burlers and fine-drawers (227) and a smaller number as 'wool-moters' (36) or winders and warpers (14). More than half the children were boys in the dressing-shops; the rest were tending the machines as fillers and piecers.

The chief expansion is to be found in the dressing-shops and the burling chamber. There were now 216 men working as giggers and shearers, clothdressers, etc., in the former. On the contrary, the slubbing chamber was only equivalent to the upper scribbling room of 1813 and had seven slubbers with 29 piecers, seven carder fillers and seven scribbler fillers with two overlookers. The other change was in the spinning chamber which now employed 15 mule spinners with 35 mule piecers (either boys or girls) and 13 jenny spinners, besides twelve warpers and eight winders. In the weaving shops were 238 hand-loom weavers, and from another document it appears that of these 238 looms, 50 belonged to the firm and the remaining 188 were owned and controlled, as previously, by 'manufacturers' who continued to pay a percentage upon the wool they used and the cloth woven from it on their looms.

The object of this Introduction has been to trace the changes wrought in the industry by steam-power and mechanical invention with the consequent rise of the factory system. It has been concerned with machinery and the human response to this new factor—either ready acceptance or prolonged resistance on the part of the workers, and a rapid utilisation of it in a factory organisation by Benjamin Gott. It is not too much to say that in his hands the organisation outstripped the machine; later sections abound with evidence of his thoroughness in building upon a composite basis of machine and hand labour an efficient system of manufacture.

It is particularly fortunate that the Hopps Letters survive to reveal the complementary selling organisation. The manifesto of 1791 declared that "the Cloth Merchants of Leeds....depend chiefly on a Foreign Demand." The Letters not only prove this, but show Gott triumphing over Decree and Embargo and sending Leeds cloths to every port in Europe and America.

## The Diary of Ioseph Rogerson, Scribbling Miller, of Bramley, 1808–1814.

BY MISS EMILY HARGRAVE AND W. B. CRUMP, M.A.

The Diary that follows is contained in three quarto note-books that were presented to the Thoresby Society in December, 1928, by Miss Lucy Hudson, the aged grand-niece of Joseph Rogerson. The marriage of his sister Hannah to James Hudson of Ross Mill is noted on December 23, 1812. His wish that the books should be preserved was respected and they remained in the care of his sister's family until her grand-daughter passed them on to the safe custody of the Society. Probably another volume has gone astray, for there is no diary surviving for 1810. Like the 'Memorandums' for 1808 and 1809 it doubtless filled a slim, paper-bound exercise-book, only too easily lost or destroyed. The third volume is stouter and contains the Diary from January, 1811, to June, 1814, when it ends abruptly without quite filling the book.

There can be no hesitation in deciding that the Diary is worthy of publication. Such material is all too rare to think of allowing this to remain unknown. It is informative, interesting, bright, varied, natural—a mirror of the social conditions of the time. But its greatest value lies in the fact that it is the business record of a scribbling miller, a type of the Yorkshiremen who had within the previous score years applied machinery and power to the earlier stages of the woollen manufacture and established themselves as essential units in the industry, and that without dislocating the domestic system on which it was based. How this came about has been described in detail in the General Introduction, which also deals with the machines to be found in a scribbling mill, so that little further explanation is required here.

Because water power had for centuries been used in the fulling mill for lifting the stocks by which cloth was scoured and 'milled,' it was natural that the new machines should find their home in the existing fulling mills where they could be driven by the same water wheel, and that newly-built scribbling mills, even when steam took the place of water power, should continue the alliance of fulling and scribbling. Hence, in the Diary, there is the ever-recurring distinction between the cloth mill and the scribbling mill.

There was another reason for this alliance. The miller was employed by the small clothiers, or domestic manufacturers, who were the back-bone of the industry and were to be numbered by scores and even hundreds in every village round about. They were his customers. For their convenience he scribbled their wool and later fulled the cloth they had woven from it, using machinery to do what they could not do themselves, or at least not as economically or rapidly. He might buy wool for their convenience, in Leeds or in the country, or they brought their own; he would dye it for them as well as scribble and card it. But the wool and the cloth alike were the property of his customers. The miller carried no stock; his mill was equipped with machinery to carry out certain processes for which he charged at fixed rates, and after treatment there the wool went back to its owners to be spun.

In these respects the scribbling miller has little resemblance to the mill-owner or manufacturer of later times, though the woollen mill grew out of the scribbling mill. Rogerson's Diary shows to perfection how, though a newcomer, he dove-tailed into the domestic system. His world is the world of the Bramley clothier, and his affinity is emphasised by the prominence of farming in the story.

Of necessity there are many technical terms and names to be met with in the Diary, and these are explained elsewhere. But it may be helpful to state briefly here that the wool that came into the scribbling mill was first teased out in the 'willy,' then dyed and dried, and afterwards passed through a 'scribbler' or scribbling machine, and a 'carder' or carding machine, these three being driven by power. The fourth machine, the slubbing 'billy,' was operated by hand, and the man in charge, the slubber, was the most highly skilled and best paid worker in the mill. At first Rogerson had five slubbers, but ultimately six in his employ, and they are much more prominent in the Diary than the 'miller' in charge of the stocks.

There is one technical term that is perverse and obscure enough to puzzle the expert. The unit for measuring the quantity of wool, as it came into the mill, was a 'cloth of wool,' the local equivalent of a 'sheet of wool,' or enough to make up into two pieces of cloth. Thus Rogerson often states that the week was begun with twenty or forty 'cloths of wool' in hand, and the word 'cloth' may be used by itself in this sense referring to wool. It left the mill in the form of 'slubbings,' wound on to cops, and the unit by which it was measured at this stage was the 'wartern,' equivalent to six pounds in weight.

It is right to give first place to the business side of the Diary for the 'Memorandums,' as Rogerson calls his entries, largely relate to his business, and many of them were entered for future reference.

Rogerson's daily record of the weather is the other constant feature of the Diary, and doubtless was a stimulus for its continuation. His interest in the weather was unfailing. At first he was content with a verbal summary of the day's weather—and this he maintained to the end. But very soon, in 1808, he began to enter the readings of the barometer and thermometer and the wind direction each morning, and in July he commenced to rule four columns at the side of each page for the date and these records. The readings continued to be entered daily in this form, with scarcely an interruption, until the end of October, 1812, when they ceased entirely.

It has not been thought necessary to print these weather records at all, nor even the daily remarks continuously, but an endeavour has been made to preserve the flavour of the Diary by a liberal selection from the latter. If a day had no entry excepting one relating to the weather it has been passed over. With a single, brief entry, such as the frequent 'Cart at Leeds to-day,' there is room to prefix his description of the weather. But when the weather bears upon the events of the day, as it often does, or when it illustrates the fickleness and perverseness of the English climate, then Rogerson's remarks are retained to refute those who declare that there never was such weather, or that the good old times were better than the present, or for those who can enjoy an apt Yorkshire expression.

The weather was really, especially in the earlier years, the link between Rogerson's two occupations—his milling and his farming. He had, as it were, two eyes on the weather. A 'fine droughty day' meant much wool, wet from the dye pans, could be dried out of doors. A 'fine harvest morning,' or 'very growing weather,' shows that he was thinking of his crops. There is no more significant fact in the Diary than this constant alternation, in the earlier years, between the mill and the land. Leading manure, sowing oats, mowing hay, shearing wheat were matters to be arranged for and put in hand in due season just as much as weekly visits to Leeds market, delivering out notes, seeking in money, repairing machinery, keeping the books, and all the other routine duties of the mill.

Domestic matters and family affairs occupy quite a subordinate place in the Diary. When it opens Rogerson was a young man of twenty-five, living at his father's home in Bramley. His father, Thomas Rogerson, and his brother John, figure in it, but chiefly in relation to the business, in which they had an interest. His mother and his sister Hannah are scarcely mentioned. Presently, Joseph Rogerson began to visit Grimthorpe in the East Riding, as events prove, in search of a wife; but his marriage is passed over in silence, and Miss Jane Greenaway, whom he married, is only mentioned twice. So it has been necessary to build up the family history from other sources.

Apparently the family sprang from Armley, for his father, Thomas Rogerson, the son of John and Mary Rogerson, was baptised in Armley Chapel, January 15, 1745. He was a salter by trade and settled in Bramley, perhaps at the time of his marriage, for his children were all baptised in Bramley Chapel—Joseph in 1782, John in 1784, and Hannah in 1789. In 1785 Thomas Rogerson bought land in Bramley, and the rate books (1791–5) show him to be rated on four properties, two of which were named 'New Barn 'and 'New House' respectively. In the earlier years Joseph Rogerson was living at home with his father, and the situation of 'our house' is revealed more definitely by the reference (January 25, 1811) to the threatened turnpike chain 'at the place above our house,' than by any other statement in the Diary. This chain bar was fixed at the junction of Town-street with Broad-lane, so that the Rogersons lived at the 'top of Bramley.'

The farm land owned by the father was scattered, judging from the field names in the Diary. 'Green Hill Closes' and 'Townend' close would lie near the low end of Bramley; but 'Swinnow Closes' and 'Stanningley Close' must have been situated in another direction altogether. As the mill was also situated near Swinnow and at the end of Broad Lane towards Stanningley, and much land on Swinnow and thereabouts was put up for sale as the result of its enclosure under the Enclosure Award of 1799, these fields and others around the mill would be bought a year or two before the Diary opens.

The father's drysaltery business, the farmland and the scribbling mill were to some extent worked conjointly, until in November, 1813, the father retired, retaining the land and making over the rest, or his share in the rest, to his sons. What interest, if any,

John had in the scribbling mill does not appear. He was primarily a stone mason, and in 1811 entered into a partnership to lease and work the famous Bramley Fall Quarries. But in the earlier years he figures in the Diary chiefly as undertaking the wool stapling branch of the family concern—buying wool in the country.

As for the scribbling mill, whatever the family interests in it,

As for the scribbling mill, whatever the family interests in it, Joseph Rogerson had for a partner all the time a millwright, Charles Lord, who was responsible for the equipment and maintenance of the machinery. The firm was known as Rogerson and Lord, and the Diary abounds in references to the financial relations of the partners, but their proportional interest in the business is never mentioned. Only after the mill had been running three years did they settle (December 4, 1809), for their share of the capital expenditure upon the mill (£5,700), and not a word is said then of their respective interests. Lord certainly had his own separate business and had no concern with the running of the mill, apart from the machinery, but he inspected the books at the periodic settlements with more keenness than Rogerson relished. He was also apparently more close-fisted than Rogerson, who felt that his partner did not take his share of incidental expenses. But Rogerson, even if he grumbles, can be fair. After writing "I rather suppose we shall not be very agreeable" one week, he adds the next "Chas. Lord & us settled for the Mill Building more peaceably than I expected."

& us settled for the Mill Building more peaceably than I expected."

The second book of the Diary opens with the title "Memorandums taken by Josh Rogerson at Bellisle Mill, 1809, Bramley."
Parson & White's Directory for 1830 gives under Bramley, "Rogerson & Lord, scribbling and fulling millers, Bellisle mill." But it has not been an easy matter to trace the situation of this mill, for the name appears on no map and is now quite unknown in Bramley. There are allusions in the Diary to the lighting of other mills at night, to traffic on the turnpike road to Bradford, and such things that convey the impression that the mill was near the Bradford road and Swinnow. But these raised another problem—whether the coach road to Bradford at that date was the older turnpike known as Broad Lane, or the newer one that takes a wider sweep to the north between Kirkstall Bridge and Stanningley and is now called the Leeds-Bradford road.

The Diary helped to settle the question by Rogerson's reference to a survey of Bramley made by Jonathan Taylor (December 20, 1811). With the help of Mr. J. W. Tyas, retired Assistant Overseer; the original "Plan of the Township of Bramley in the Parish of

Leeds.... Made in 1811 by Jona<sup>tn</sup> Taylor" was found at the Bramley Rate Office, though the Survey Book has disappeared. This plan shows Broad Lane only, so that the newer turnpike had not then been made. Nor was it made until ten years later, or nearly so.

A definite clue to the site of the mill was also obtained from two notes made in 1808. The first (September 28) reads "Abm Hainworth Sale: they liv'd opposite our Mill," and the other on Nov. 2nd—"Sale of Abm Hainorth land and houses." A reference to the newspaper files produced the advertisement: "To be Sold by Auction...on 2nd of November....Freehold Messuage or Dwelling house with the Two Cottages & sundry other out-buildings situate near the Broad Lane Ends in Bramley....late in the occupation of John Hainsworth and his Undertenants."

Now, nearly at the western end of Broad Lane, just before it is crossed by Swinnow Lane, Thorp's "Map of the Town of Leeds,..." 1822,¹ shows just off the lane a small cluster of houses named 'Westfield,' and a building that may be a mill; in addition there is an unmistakable mill dam, at the head of a small stream that flows southwards to 'Hugh End' and there joins the Farnley beck. Whether the name Westfield was intended to include the mill is uncertain, but undoubtedly the mill is Rogerson's, and the dam, possibly fed by springs, is the one in which he shows so great an interest, recording its seasonal overflow and his occasional fishing in it or stocking it with fish. Probably his own name of Bellisle Mill fell out of use and was displaced by the native name—Westfield. Confirmation is to be found in White's *Directory* of 1842, which gives 'Jos. Rogerson, Westfield Mill,' in the Bramley list of scribbling and fulling millers.

Of the later history of Westfield<sup>2</sup> little need be said here. It developed on the usual lines into a modern woollen mill. The *Directory* of 1870 gives John Gaunt & Son of Westfield Mill in both the list of scribbling millers and of woollen manufacturers. In

<sup>&</sup>lt;sup>1</sup> The new Bradford turnpike appears on this map joining the old one (Broad Lane) at Swinnow Bar.

<sup>2</sup> The following	details are	extracted	from	the	Bramley	Rate	Book	of
1825:							Value	
Owners		Occupie	re			(	C	d

Owners	Occupiers	£ s. d.
Rogerson J <sup>n</sup> & Jos <sup>h</sup>	Themselves, Land	6 - 15 - 0
" M <sup>r</sup> Joseph	Himself House & Land	9 - 10 - 0
Rogerson & Lord	Themselves, Mill &c.	64 - 15 - 0
	Sam <sup>1</sup> Harrison Cottage	I - I3 - 4
	John Sunderland ,,	I - 8 - I

1888 Isaac Gaunt was a woollen manufacturer there; but in the *Directory* of 1902 Isaac Gaunt Ltd. of Westfield Mill had become worsted manufacturers. A dozen or more years ago Rogerson's mill was destroyed by fire, and the cottages have disappeared as well to give place to the great buildings on the site of Bellisle Mill to-day.

Turning once more to family matters, Rogerson's marriage claims first attention. Late in 1809, after a visit to some friends, Mr. and Mrs. Marshall, at Grimthorpe, he despatched a present of two pieces of cloth, 'pellins,' suitable for ladies' wear, "one for Mrs Marshall and one for Miss Greenaway." At Christmas more presents were sent, including a "Pinchbeck Watch & a Gold Broach worth 31/6." The Diary for 1810 is lost, but in March, 1811, Rogerson was again spending a week-end at Grimthorpe. Then in the middle of May he went to Pontefract for a fortnight's training with the Militia. He wrote up his Diary there to the end of the month and then it ceases for ten days. The next entry, "June 10 Fine Morning—Chas. Lord repairing Stocks," shows him once more at Bramley attending to business as usual. But a day or two later a fresh interest in his life is introduced by the remark "Begun to get stone for a new House." Before the end of the month he had "staked a place out for a house at top of town allotment," and the building of the house continued to be an almost daily topic well into the next year.

All this activity was not the prelude but the sequel to his marriage, for though he never mentions 'my wife' till November, he had brought his bride home from Grimthorpe on the 9th of June. The marriage of Joseph Rogerson, drysalter, of Bramley in the parish of Leeds, and Jane Greenaway had been solemnized at her parish church of Great Givendale the previous day; and Wm. Marshall was one of the witnesses to sign the register.

Many references to the new house prove without doubt that it was the older portion of what is now called Grove House, facing the top of Town Street and occupying the corner of Broad Lane and White Cote Hill Road. In the Diary Rogerson calls the site Grove Hill and it was on the 'Top of Town' allotment, *i.e.*, a part of the recent enclosure on White Cote Hill; in the *Directory* of 1830 his residence was given as Grove Cottage. He took delight in planting the grounds with trees and set the date '1812' upon a cornerstone of the house; and though the stone is now masked by newer additions the house still remains secluded in its tree-girt garden.

The references to the new Turnpike house or bar, set up opposite his house and at the top of Bramley, in 1813, agree entirely with this position, and his mention of the 'intended public house opposite me' dates the erection of the Globe Inn there.

The Diary records the birth of two children. The first, Maria, only lived a few weeks and was buried 'at Armley Chapel under the 6<sup>th</sup> Tree from the NW. Corner,' near to which spot Rogerson himself lies. The second daughter, at whose birth he confessed himself 'fast to know what name to call it by,' was christened 'Mary Hannah,' but died at the age of 17, and a third child, a boy, died in infancy. Miss Hudson states that there were also four younger sons who emigrated to Australia.

The marriage of his sister Hannah to Jas. Hudson, a neighbouring scribbling miller of Ross Mill, is duly chronicled at the close of 1812, and is followed a few days later by two events: 'Hudson made his appearance at Bramley Chapel' at the Sunday afternoon service, and there was a 'Bride visit' at the father's home the next day.

A few months later, in May, 1813, his brother John was married at Selby. Rogerson recounts the day's proceedings: "Took a walk round Selby Church'fore Breakfast; at about 11 o'clock went along with Jno to get married....got to Bramley about 12 at night"; but he never even names the bride.

The rest of the family chronicle may all be gathered from an altar tombstone in the churchyard of St. Bartholomew, Armley. Rogerson's wife died in 1826, aged 36, his mother in 1827, and father in 1828, at the ripe ages of 81 and 82 respectively. The last to be buried there was Joseph Rogerson who died March 7th, 1846, in the 65th year of his age.

The Diary is exactly what it professes to be—Memoranda relating to Rogerson's business (and the weather) day by day, and notes of what he did or saw or heard during the day. There is in it much more variety of topic and much less repetition or dullness than might be expected. Immersed as he was in his business, he was still a shrewd observer of what went on around him, and somehow found time to jot down notes on all manner of things that came under his observation. He rarely ventured upon a continuous narrative, and when he did it came tumbling out in a spluttering torrent. Much in the same way a stream of superlatives<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> "I believe there is the meanest, lowest, dirtiest, dishonorablist, selfishist set of what is called above the common level of Men in Bramley of any town in the Kingdom." November 3, 1809.

or a batch of superfluous h's was occasionally needed to relieve his feelings.

The highest value of the Diary lies in its day-to-day record of the running of the Mill, though it presents some difficulties to the ordinary reader unversed in the technical processes of the woollen industry as practised a century ago. There are regrettable gaps in the record; for instance, Rogerson scarcely refers to the children employed in the mill. Once there is an indirect reference to them as the pieceners and fillers who were paid each Friday night (January 29, 1808); and again the same year (November 11) they are mentioned—"Slubbers & Childer laid in Mill all Night"—because they were working till 11 o'clock. They were also working on Sunday that week—"Making seven days in the Week in the Mill," as Rogerson expressed it.

These outrageously long hours for children when the mill was 'throng' was one of the evils of the time. There was no regulation and no inspection, and an owner did as he pleased. Writing of himself, at the beginning of 1811, Rogerson gives a proof, not only of his own industry, but of the long hours expected of his workpeople:

"For those first four years of this mill of ours running I have seen us begin almost every morning, sometimes at 5 & 6 o'clock in the morning & also seen the fires put out at night when we gave over, which was at 8, 9 & 10 & 11 o'clock at night: & we have generally run later in winter than summer, in winter frequently all night. I have had to go home for Breakfast, Dinner & Drinking & I generally got back before they had got theirs."

Of the slubbers there is much recorded, for everything depended upon them and they knew their value. The slubbing billy was the only machine in the mill operated by hand. Rogerson admits that they worked well when there was pressure of work, but too often they were away drinking for a day or two after the local Feasts, and the mill was brought to a standstill in consequence. The day after Bramley Feast in 1808 (July 23) he sums up the situation neatly—" Mill running & men running away"; and the next year, after Pudsey Feast (August 28)—" Our Slubbers have not given over feasting yet, they have done nothing these three days past."

It is impossible to do more than glance at other matters within the mill that claimed his attention, such as wool drying, the plant, repairs to the steam engine, buying oak wood for new stocks and fixing them, the periodic renewal of cards on the scribblers, and so forth. The Diary also abounds in figures and statistics of economic value—the quantity of wool for the week's work, wages, prices charged and advances, estimates, turnover, and balance sheets. Another frequent topic is the supply of coal for the engine, its price at the pit-head and carriage to the mill. The Diary comes to an end before the mill was lighted by gas, but in 1813 Rogerson had decided to introduce it.

Once a week Rogerson rode to Leeds for the Tuesday market, and the cart came back laden with wool to be scribbled at the mill. This wool belonged to his customers, the clothiers of Bramley, Pudsey, and Stanningley; but as he never mentions any of his transactions in Leeds it remains uncertain whether he bought it from the woolstaplers to his customers' orders, or whether he received it from them. As Bramley lay within the Coloured Cloth area Rogerson frequented the Coloured or Mixed Cloth Hall exclusively, and the management of this Hall is discussed more than once. In connection with its enlargement in 1810 he proved himself to be a true prophet in his shrewd forecast of the future. "My opinion of Leeds Cloth Hall is this: that in some future day it will be of very little consequence as I think Cloth will get to be manufactured at Mills and carried to Merchants' houses" (December 22, 1809).

Except for comments on the state of trade—' Market slack' the visits to Leeds do not, as a rule, provide much news or gossip of the day. There was another business object in seeing his customers in Leeds. On the first Tuesday in the month, at any rate, Rogerson expected to receive payment of a fair number of accounts, though often enough he records his disappointment—' Money scarce in Leeds to-day.' Many memoranda in the Diary relate to the firm's method of collecting its debts. Rogerson's custom was to post up the books and prepare and deliver the 'notes' at regular intervals in anticipation of a 'Pay Day.' This was at first held at home, but later mostly at the Pack Horse Inn, Bramley, kept by Wm. Spence. Rogerson and his partner were supposed to pay the expenses of the attendant supper and drinks in turn, so that the Pay Days, which fell early in March, July, and November each year, are carefully noted in the Diary. But even Pay Days, with a supper added, were not wholly effective, for from time to time the Diary reveals one partner or the other calling on the clothiers of Pudsey especially, to try to collect the accounts due or overdue.

The incidental topics scattered through the Diary are as varied





JOSEPH ROGERSON, 1812

as they are numerous and add greatly to the interest of it. Some concern Rogerson himself, others reflect the happenings in the little world about him in Bramley or Leeds, and others the great events in the outer world—the war on the continent, the friction with America, and at the close the downfall of Napoleon. Sometimes a chain of entries tells a story like the one of the building of his new house (1811-12), or the dispute over a new turnpike bar at the top of Bramley, or the effort to instal an organ in Bramley Chapel in 1813. Sometimes an incident or story is told in a breathless narrative, as that of Wm. Perigo, bewitched by Mary Bateman, in October, 1808, or the search for some stolen wool in December, 1812. Others are seasonal events that recur each year, such as haytime and harvest, or the series of local Feasts, or his journeys. Of these the one into Nottinghamshire, in October, 1812, is described in part at some length, and with considerable acumen. There are in addition to these many jottings of a statistical or economic nature, particularly of prices.

The Luddite riots that might be expected to bulk large in the events of 1812 are barely mentioned. The attack on Rawfolds Mill is recorded (April 15), and at the same time reference made to letters from 'General Ludd' in Bramley, and to the strong body of soldiers quartered in Leeds. There are one or two later references, but any disturbances in Leeds, so far as the Diary takes note of them, centered in the Corn Market and were due to the soaring prices in August. On the 5th Rogerson wrote "Wheat is from 67/- to 70/- per load—this is a distressing time for poor people"; and a week or two later a man, who stood out for £4, had his wheat seized and trodden underfoot.

From the battle of Leipzig, in 1813, on to the abdication of Napoleon, the war takes a more prominent place in the Diary. When the news came of the entry into Paris (April 7, 1814) Rogerson, for the first time, becomes jubilant and describes in a hectic, staccato style the rejoicings and the aftermath of the news. Presently the pæan dies away and unpleasant consequences begin to obtrude themselves on his notice—"Trade has turned very flatt." By the time peace has been signed, at the very end of the Diary, he remarks ruefully: "This peace makes all very slack—I think now as it is com'd nobody seems so very fond of it; there will be a deal of money lost in various ways."

To his church-going and the history of Bramley Chapel, as it then was, during these five years there is frequent reference throughout the Diary. Rogerson was possibly churchwarden in 1812, as his father had been in 1810, and he displayed considerable interest in church affairs. Towards the end of 1812 the Diary begins to record the efforts to raise money for an organ, and he was a proud man, when nearly a year later, he wrote (September 19), "Open'd our New Organ to-day; there was a very grand Sing, the Chapel so crowded as I never saw it."

Once or twice there is a caustic comment on a preacher: "We were obliged to have candles lighted before he had done," on December 3, 1809, or of another, "he does not hold out many inducements for one to go and hear him" (July 16, 1809). Occasionally he attended a Nonconformist Chapel, and on one of these occasions, at Ossett, he heard "what they term a very fluent grand speaker, but to give my opinion, had he read his own sermon in print, he would have been ashamed to own it was his." But he is quite fair, and more than once his Diary reveals the vigour and growth of Nonconformity. Commenting on the success of the first day's appeal for the New Organ fund he added, "which is rather surprising when we consider what few goes to Chapel in these days while the Methodist place is crowded with hearers."

The Diary shows little evidence of reading on Rogerson's part, but he was certainly not without literary taste. It ran rather to verse, for various loose sheets contain rhymes that he copied from various sources, and one preserves a rhymed epitaph of his own composition on "Old S. Musgrave—he had a stone erected in Bramley Chapel Yard some years before he died." The Bible for which he paid £4 6s. must be classed with the Silver Teapot that cost £8, and the portrait of himself1 as suitable to adorn the best room in his new house. There is more evidence of interest in antiquarian matters. He noted the discovery of a Roman Urn at Adel, and towards the end of 1811 showed considerable interest in a bundle of charters of Kirkstall Abbey, so much so that he gave the translation of one of them, that is now in the possession of the Vicar of Bramley. The same week he copied an inscription on a stone set up in 1741 on Bramley Common to record the grant of grazing rights by the Abbot of Kirkstall in 1311. There are other statistical returns relating to Bramley, quoted in the same year, that show he took an interest in the welfare and progress of his

<sup>&</sup>lt;sup>1</sup> This is reproduced full size, by the kind permission of Miss Hudson, who possesses what is supposed to be the small painting mentioned by Rogerson in September, 1812.

Rogerson's love of observation had its fullest play out of doors. Even in and about the mill he was continually observing the traffic along the turnpike road, the overflow of the mill-dam, or the lighting-up of distant mills on winter evenings. But its chief outlet was in his weather records and his notes on the state of the crops. As soon as he was out of doors he was seeing something or other. Much of the charm of the Diary lies in the pictures it presents of the Seasons and the harvests. From the first sunny days of spring to the late autumn there are graphic touches that carry the reader straight from the mill, or the cloth market, into the meadows and cornfields. Even as he rode into Leeds he was looking out for the first mowers or the first shearers at work. When he journeyed south his eyes were on the country and he was comparing the land and the crops with what he had left behind him. Thus, when approaching Sheffield on October 12, 1812, he wrote in his Diary: "pleasant looks-out all the way, very good buildings and fine romantic Country," and towards Chesterfield: "still finds it a pleasant Country full of woods and trees, tho' it seems all the way to be rather later land for there is a good deal of Corn of all sorts out."

His business left him little opportunity for out-of-door recreation other than his farming, though he turned enthusiastically to planting the grounds around his new house with trees in 1811–12. But Rogerson did manage a little fishing in his mill-dam when work was slack, or on a Sunday. This was mostly in 1809, when his notes make rather quaint reading, suggestive of tentative experiments, stocking the dam with single fish caught in the Aire, rather than serious fishing. Thus he records on September 25: "Put a young Pike and another Tench in our dam Yesterday." Then in 1811 (May 6) the pike was caught again with a net and found to have grown in weight from 3 oz. to 5 lbs. A few days later a perch was caught and put back, "after cuting the top finn on its back." In 1813 he turned in about a thousand fish—he thinks they are carp—that he begged from another mill in Armley.

that he begged from another mill in Armley.

Only once or twice did he go out with a gun—'shot a few field-fares'—and once, in 1809, he went to Pontefract Races. Rogerson had joined the local Militia in 1809, and the Diary contains an account of the training at Pontefract in 1811 and 1812, but he resigned his commission the next year.

It is impossible to read a single page of the Diary without being reminded of the great changes in social conditions since the early

years of the nineteenth century. Bramley and its neighbours, Pudsey, Stanningley, Farnley, Farsley, and Armley were then isolated villages surrounded by agricultural land. Some of them, Bramley for one, were in the old parish and borough of Leeds, but they governed themselves in the old way by constable, churchwardens, overseers of poor, and of highways, much as they had done in the sixteenth century. Not a single new turnpike had been made to link any of them to Leeds. The old road between Leeds and Bradford, that had been turnpiked, passed the top end of Bramley, but beyond Kirkstall Bridge it went up Kirkstall Hill and by Burley into Leeds. This is the road that figures in the Diary under the name of Broad Lane, and by it apparently Rogerson always rode into Leeds. The only alternative entrance was by Leeds Bridge at the foot of Briggate, with nothing but irregular winding lanes leading through Armley and Holbeck towards it.

The farm land was held and cultivated under totally different conditions from those of to-day. The production of milk for sale in the town was negligible, and there were scarcely any 'farmers.' But every clothier (and these villages were full of them) held or owned some land, enough for his tenters and to keep a horse and a cow or two, and many of them, exactly like the Rogersons, grew enough oats and wheat to feed their horses and keep their families. The recent enclosures had brought much land into the market, and clothiers were being attracted to these outlying villages by that and the proximity of the new scribbling mills.

Practically all these scribbling mills had come into being during the decade before the Diary opens. They must not be thought of as clustered together or near at hand to Rogerson's own mill. They were scattered amongst the townships, mostly on the Holbeck and its tributaries, or down by the river Aire. The landscape was then open (as well as clean) and Rogerson could see a mill lighted up at night some distance away. As there are many references to them it may be useful to give a list<sup>1</sup> of them here.

CAPE MILL, FARSLEY. Built by Mr. Pollard of Horsforth and at first driven by a water-wheel. Abimelech Hainsworth tenant until 1813, when it was bought by him and his brother Joseph.

BROOM MILL, FARSLEY. Samuel Walton.

Ross Mill, on the Aire, between Rodley and Newlay. James Hudson.

<sup>1</sup> Cudworth's Round about Bradford (1876) has supplied many of the facts.

Pollard's Mill, at New Laiths (Newlay). Musgrave & Co. Bellisle, or Westfield Mill, Bramley, towards Stanningley. Rogerson and Lord.

Hough-End Mill, Bramley, on Farnley Beck. (?) John Lister. Butter Bowl Mill, Farnley.

GIBRALTAR MILL, PUDSEY. Built in 1801-2 by Joseph Thackrah and Fairfax Carlisle. Burnt down 14 June, 1812, and rebuilt. One of the first to be lighted by gas.

Company Mill, Stanningley. Built about 1794 by John Varley; probably the oldest scribbling mill in the district. Afterwards became Waite's Temperance Mill.

WATERLOO MILL, BRAMLEY. John Haley. The origin of this is to be found in Rogerson's note on October 19th, 1813, that John Haley had staked out a 'millstead' the previous day.

Reference has already been made to the importance of the local Feasts which followed each other through the summer, beginning with Bramley Feast on the Sunday nearest July 20th, the festival day of St. Margaret, to whom the Chapel was dedicated. Other holidays were of little count, though the slubbers were slow to return to work after Boxing Day, and in 1813 Easter Monday was marked by a 'holiday at our mill this afternoon.' But Ash Wednesday was usually noted as 'Fast Day.'

The Fairs in the district were also still real marts for live stock. Sometimes their occurrence is noted as at Leeds, Bradford, Wibsey, and Adwalton; sometimes Rogerson may be found selling or seeking a horse or buying cattle at one or another. The journeys further afield to Doncaster Fair, or into Nottinghamshire, or the East Riding to buy wool, were largely undertaken by his father or his brother John; but Rogerson describes more than one of his own trips on that errand. The last one (September, 1813) shows him spending four days on a journey to Rufford and back. There were two long days in the saddle, and two occupied in weighing the wool by the tod of 28 lbs., and packing it at the farms. Probably he carried, slung over the saddle, a pair of 7 lb. weights, cast in bronze in the shape of a shield, adorned with the Royal arms, such as were made for the use of the wool-men on their country journeys.

Similar primitive methods of buying show themselves in all kinds of undertakings. In the absence of middlemen—wholesalers and retailers—material was bought direct from the quarry, the coal-pit, the foundry, or the wood, necessitating both journeys and provision for transport. Many illustrations of this may be found

in Rogerson's account of his house building. The cart goes to a quarry at Woodhouse for stone for door jambs or a step, or it goes to Kirkstall Bridge for timber. When stoops and rails are wanted Rogerson takes his partner to look at some standing oaks; for iron ranges or railings he journeys to the Low Moor Ironworks, and later their workmen are fixing them at the house. Much in the same way for the mill, Lord buys an oak tree at Apperley Bridge for a new stock.

The Diary tells very little about the carriage of wool from a distance; but in April, 1811, there are one or two noteworthy references to some Ash wood. First, there is an offer from Pocklington, with terms quoted; then a few days later, a visit to Grimthorpe and Pocklington. The timber is bought at a slightly lower price and is to be delivered free at Kexby Bridge, some few miles towards York. Two or three weeks later the cart goes to Leeds to bring it up to Bramley. It is clear that the object of sending the timber to Kexby Bridge was to transport it by water to Leeds—first down the Derwent, then up the Ouse to Selby, and thence by the Selby Canal and the Aire and Calder Navigation.

There was also water carriage, by the Leeds and Liverpool Canal, from Leeds towards Bramley. Kirkstall Bridge would be the nearest wharf, except for Bramley Fall Quarry, and in October, 1813, Rogerson had delivered at Kirkstall Bridge a boat load (40 tons) of potatoes out of Nottinghamshire. A week later he was killing two oxen sent from Grimthorpe, so that it is evident that he was ready to deal in almost anything that came his way.

The dialect words and modes of expression which they will encounter in the Diary may add to its interest for many readers. Certainly they are not so many or so obscure as to deter any one, and they give a pleasant flavour that would be lacking if Rogerson had attempted to choose his words, or to write correct sentences. As it is, the Diary is characteristic of the time and the place: it is honest and unaffected.

The adjectives Rogerson uses in describing the weather are just such as may be heard in any Yorkshire farmhouse—a winterly day, a dirty morning, growing weather, or even fine-ish. The last he spelt 'finish,' though the first time he wrote it he altered it. But droughty weather, or the converse very little drought, is the most typical, for it was constantly on the lips of the clothiers (it is likely that they and the slubbers called it drufty) who looked to a droughty day, i.e., one with a drying breeze, to dry their wool, or warp, or

cloth. When busy at the mill they were throng, or slack when the opposite; and when trade was very quiet the mills were in backwater.

As usual in the dialect the superlative is always formed by

As usual in the dialect the superlative is always formed by adding est—the winterlyest morn, the unreasonableest people, and adjectives are prefixed instead of adverbs—an uncommon hard frost, extreme ill to-day, very ill tired. Another dialect feature is the omission of the sign of the possessive with proper names, as in Johnson lad, Hainorth coals. Somewhat akin is the way in which a man's name is followed immediately, without any comma, by that of his town, thus David Hague Horsforth. So occasionally [of] has been inserted or sometimes a comma when otherwise the meaning might be obscure. Other words and phrases worthy of note are shearing corn, both ends of the day, a many people, a very deal of fish, fettled the boiler, to year for 'this year' (21 July, 1812), and near a stand for 'nearly at a standstill.'

When Rogerson writes of himself, Goes to Grimthorp, without a pronoun prefixed, he is likely to be regarded as illiterate, but he is simply using the old dialect form of the verb, in any person, either singular or plural. Similarly he has hopes, for 'we hope,' thinks, and finds. The verbs generally in past tenses tend to illustrate dialectal uses, as—we have run'd. So also the singular has is used instead of 'have,' and us for 'we' or 'I.' He often writes Chas. Lord and us begun, but occasionally it is Chas. and I, or even Chas. and me.

The aspirate 'h' is only omitted from 'hedge' and 'Winterhedge,' but it tends to be added superfluously to 'as,' especially in a string of comparisons, or when he is writing with some feeling. There is a notable example under August 4, 1809.

Rogerson can be plain spoken, and his indignation finds an outlet

Rogerson can be plain spoken, and his indignation finds an outlet in a string of superlatives, as on November 3, 1809, or in a rush of tangled narrative, as on October 18, 1809. He can also express himself very neatly at times, as when on March 29, 1808, when he had given notice to one of the carters. "Told Jno Varley....to look for a new place. I understand he has done so; it is the first time he has done as I bid him."

The MS. of the Diary is well written, though the writing deteriorates, as at first it is almost copper plate. The pages were ruled with pencil, as well as the columns for the weather records, as the books were filled. The spelling also is good, though there are occasional lapses due to carelessness or haste. 'Brockla' for broccoli is perhaps the only example of a word spelt by sound, but short words

ending in a consonant often have the final letter doubled, as flagg flatt, sett. It has already been mentioned that as and has are liable to be confused, so also are of and off. Certain common verbs are often written in an abbreviated form,  $s^d$ ,  $w^d$ ,  $sh^d$ ,  $tho^t$ ,  $bo^t$ , and 'scribbling' is often reduced to  $scrib^g$ . This last has generally been expanded as it is a strange word, but the others have been printed as written, often enough to illustrate the habit, without perplexing the reader. The same applies to of and off. If the reader is likely to be confused or to miss the meaning of is corrected to off, and only rarely has this been printed "of[f]," because a multiplicity of brackets destroys the pleasure of reading. The square bracket has been used for any addition either of letter or word; and conversely the round bracket has been used to indicate a redundant letter, generally an h, in the MS.

Punctuation has presented rather greater difficulties, but again a hard and fast rule has not been laid down. The object aimed at has been to make the Diary intelligible with the least possible departure from the MS. Rogerson's most frequent marks were a dash and a kind of double crossed dash (≠), which may be interpreted as a full stop, but has often been treated as equivalent to a dash. The MS. has not many full stops and practically no commas, whilst capitals are so numerous as to be no guides. It has been necessary to insert commas, but they have been used sparingly; never, for example, to separate the string of adjectives describing the weather. A comma, or sometimes [of], has been inserted to separate a man's name from that of his town or village, when otherwise the reader might be confused. But the chief change has been the introduction of the semi-colon and the colon (in places where the MS. has no stop whatever) to separate distinct topics, and more especially to break up long narrative passages and make them intelligible. Something had to be done, and this appears a simpler way than changing the string of co-ordinate clauses, typical of the period, into the shorter sentences of modern times. The capital letters have not been tampered with at all, and consequently the reader will discover, in spite of the plethora of them, that a number of place names, such as field names, are printed without capitals.

## THE DIARY OF JOSEPH ROGERSON

Book I.

[On inside of cover]

Take as much pains to keep these Books as I have to Write them 1844

Josh Rogerson

1808 Memorandums for the Year 1808

Jan<sup>y</sup> I We are standing<sup>1</sup> at our Mill making the Will<sup>y</sup> Drum larger. Fine'sh day Glass low. Trade very Bad & work very scarce. It is a Year since we begun our Mill this Day. No frost very dirty roads.

2 A Wild soft Day Glass at Stormy. Nailing New Cards on

to Rider Swift & Doffer.2 Sellars Nailing them.

Sunday a very fine sharp day.

4 Very fine & frosty our dam more froze than ever it has been since it was made. Pd Wainwright's Accot for Lime for Mill. Making a sort of a Causeway on Broad lane but not before it wanted it. Wm Farrar Cloth & Wm Spence overseers of the highways & poor ones. Wm F. is ———.

A patent steam engine of 16½ Inches Cylinder will not carry 3 Scribblers 3 Carders puller & Willy & 3 Fallers & a Driver, for so it was told me by a Slubber from Yeadon where they were forc'd to put in a 20½ Inches Cylinder to turn the above, they have a proof

of it to their cost at the above Mill.

Slubbers earning from 14/- 15/- 16/- & very rare 18/- Pr Week but most men about 14/- or 15/-; there are men working on the roads for 9/- Pr Week that wod not strike under 21/- Pr Week in a fair trade & flour is 2/10 & 2/11 Pr St. 14 lb. to the Stone. There is scarce a Mill has work for Daylight so that there are very few that lights; both Clothiers & Mills look very Dull at night to what I've seen. The Clothiers are the very Devil to please, I mean those that are likely to pay 20/- in the pound.

A New Coach has begun on this Road<sup>3</sup> this Day called the high Flyer, four Coaches run this road now, & about six week since

<sup>1</sup> He means, as will be obvious to many readers, that the mill is standing or stopped for repairs.

- <sup>2</sup> To save repetition the technical names for machinery, processes and cloth, many of them now obsolete, are briefly explained in the Index and Glossary. But the General Introduction should be consulted for a more adequate description of the processes of the woollen manufacture as then practised.
- <sup>3</sup> The Road in question was the Turnpike road from Leeds to Bradford, which traversed Bramley along Broad lane at this date. This was the line taken by the first turnpike made under the Act of 1741. About 1820 a diversion was made between Kirkstall Bridge and Stanningley. This is now known as the 'Leeds-Bradford' road, and it misses the older Bramley altogether.

there was only two, there was too few before & now there is too many.

Jno, Josh & Father at Leeds, a soft morning but very slippery.

A Bad Market for Cloth but a good many Merchants in the Cloth Hall. One Waggon and four horses might have pulled all the Cloth that has been bo<sup>t</sup> today, or any market day lately.

6 A Fine Day no frost but wildish—seeking money in, but scarce any to get. Gave a slubber notice to leave, the first slubber

that ever left us, his Name is Josh Firth.

7 No Wool comes in yet. Cape Mill standing and all but two scribblers at Company Mill.

8 Very little to do at the Mill. Fine & open very bad roads.

10 Sunday was at the Chapel.1

- on Saturday Night, parted with him more for making bad copping more than making bad slubbing. Rec<sup>d</sup> a Sheet of Wool<sup>2</sup> from Tuxford in Nottingm. to Scribble and Slubb. What makes trade rather worse is the talk of a War with America which will be bad for Bramley as our trade lies all there for our sort of Goods made here
- may have Coals for  $3\frac{1}{2}^{d}$  Pr Ld. Mill likely to be rather better employ'd this Week. Upon looking our Slubbers Accts over find that they have average wage to the sum of 22/6 Pr Week; the least has earn'd 21/6 Pr Week, & still they are far from being satisfied. Jno & Father at Leeds. Pd Rooley Staith in full for Coals at 4d Pr Load.
- 13 Dull soft morning at Calverley this Day. There are 5 Coaches Run this Road now.
- 14 Very Wild Day. Pd Glazr in full. Pd Woodall in full. Varley at Coal pit with both Carrier Horses. Rather more work this Week. Barnes throwing Manure up. We have this Day finish'd up the whole of our Coals we have not a Load about the place. Wheat looks uncommon well & is growing fast.

15 Getting the Seak<sup>3</sup> on the low end of the Close above the Mill.

Very frosty.

16 Getting Seak on again to the same place, it covers all the

low end of the piece. Frost with part snow.

- 18 Fine frosty Day. Tipping & lining our End stocks. Got a new Slubber this Morning likewise a fresh filler for Jowett. I was at Leeds.
- 19 Working at the Stocks rather better off for work than we have been.
- <sup>1</sup> Bramley Chapel. Like all the townships in the old parish of Leeds, Bramley had only a chapel of ease till after the middle of the century. The old conditions are still reflected in the name of Chapel-town or Chapel Allerton.
- <sup>2</sup> The bag in which wool was packed was known as a sheet, hence a sheet of wool is the quantity of wool therein.
- <sup>3</sup> Seak, the refuse or sediment from the scouring of wool was stored in tanks or ponds and afterwards used as 'tillage' or manure.

20 Rec<sup>d</sup> a Cloth of Jn<sup>o</sup> Gaunt of Pudsey for some slubbing that we had stop'd for the Money he owed us—we have the liberty to sell it on the I<sup>st</sup> of April next for the debt if he does not bring us our money on that Day or before. Spreading the Seak on hill side close. Wild day.

21 Uncommon hard frost & very cold. The stocks finished last Night. Our Team leading Coals from Slip-in Pitts—2 Billies

standing the whole of the Day.

22 Very frosty—I Billie standing. Pd Nicholson in full for sand and hair—Pd all the fillers & pieceners in full. Saml Harrison at Halifax respecting a piece of Cloth that was sent to Broad Gates.

23 Rather softer this morning. Settled with Slubbers in full.

24 Rainy Day. Mr Hodghson¹ Preacher at Bramley.

25 Barnes leading manure on to the close with one horse.

26 Varley at Leeds with carrying cart. All machines & Stocks going. Our team at Rooley Staiths for Coals. No prospect of a trade yet all the Clothiers seem to go by sober.

27 All Dye pans in use, pretty well off for work this week. Barnes leading Manure on to hill side field. Measuring Mill Dry

houses & houses this Day.

£	s.	d.
695 y <sup>ds</sup> Slate pointing at 2 <sup>d</sup> P <sup>r</sup> y <sup>d</sup> 5	15	IO
	5	3
742 [ft.] or 2[4]7 yds of Collaring at 1d Pr yd 1	,,	7
76 Windows pointing at 2 <sup>d</sup> Pr W.	12	8
2 Days Work	7	
$3\frac{1}{2}$ Do Do	12	3
I Do Do	I	2
Whitewash &c	2	6
18	17	3

The above is W<sup>m</sup> Deuce's acct for plastering.

28 Very wild day. Settled with Wilson for hair—Shot at a

Wild Duck on our dam. Bot Doffing plates at 2/9 Pr Yd.

29 Very wild day Getting hay at Charles Lord, ours finished at the Mill—Roads very Bad. Very fair for work in the Mill. Pd pieceners, fillers, Dryer & Willyer's wages; we make it a rule to pay them every friday at night.

30 Carriers and horses plowing this afternoon at Chas. [Lords]. Very well off for work to the end of the week—two great pans at

work to-day. Spreading manure on to hill side close.

Feb. I Fine soft morning, at night still & like spring. Very well off for work this Day likely to have a good week of it—thinks people are making rather more Cloth now. Spreading manure on hill side. Sent by Chas Maltby to Tong to get us new seale<sup>2</sup> Ropes.

<sup>&</sup>lt;sup>1</sup> Rev. R. Hodgson, first Incumbent of St. Stephen's, Kirkstall.

<sup>&</sup>lt;sup>2</sup> Perhaps sealing ropes with which to 'seal' the cows in the mistal.

2 Wild soft morning—Father, Ino & me at Leeds. Rather better Cloth market. Carrier at Leeds for Wool.

3 Wild soft morning, seeking money in—Saw Jnº Fairbank [who] arrived from America about a fortnight ago—Says he thinks there won't be a war between this country and America; the poor people are very much out of work at New York; he says he has seen Cloth of the American Manufacture, but [they] cannot manu-

facture it as cheap as we can send them it.

Fuel is dear there a one horse cart load of Wood cannot be bot for less than 17/s. He has seen the Wool of that country which is pretty good and w<sup>d</sup> was it here sell from betwixt 20/- to 30/-Pr stone but worth a great deal more there. At New York he saw some Logwood to sell they wanted £16 10s. Pr Ton; rather thinks they may buy it for less in Liverpool the same quality, as there may be bot good Jamaka Logd in Leeds at £12 pr Ton cr—Rather better towards night but very dirty roads. Sold a fat cow at home for £16 10s. Wheat looks very well.

The method of colouring gun Barrels is as follows.

The Barrel being bright take some Aqua fortis or spirits of salt & put a little water to it let the Barrel be till it is Sufficiently Brown'd then rub it with a little Bees wax or Linseed oil.

We are situated for work at mill as follows—

2 Do True Greens | 16d to 2/- Pr Wartrn 3 Cloths¹ wool Blue

2 Cloths Mix<sup>r</sup> } 14d Pr Wartrn

2 Cloths Scribbling & about 2 Scribbled

I Wet & one to fetch from Pudsey.

Fine still frosty morning.

Settled with Jno Gaunt Pudsey as follows—

He delivers into my hands 3 Pieces of Cloth to be sold for what he owes us if he does not pay us on the 1st of April next.

Got a new Weather Glass stands at 29,76. Wild again to night.

Glass rather lowering.

Had the misfortune to put one man's White to another mans

Colour'd Wool-very ill vex'd righted it with little trouble.

We have run'd all this week from 1/4 'fore seven till seven at Night all this week. Dirty Roads—Our team Wagg<sup>n</sup> at Rooley Staiths. Carr<sup>r</sup> leading manure this afternoon.

I have not seen them light those 2 last Nights at Butter Bowl

Mill.

5 Very wild rainy morning Barom<sup>r</sup> at 29,37 Therom at 45° in my counting house.

7 Mr Hodghson preached this afternoon

<sup>1</sup> A Cloth of Wool. The use of this dialect term as the equivalent of a sheet of wool is very confusing. The distinction between a cloth of wool which came to be dyed or scribbled or both; and a piece of cloth which came to be scoured or fulled in the Cloth mill is fundamental. The one was raw material, the other the almost finished article, the woven fabric.

Father set off for Hull on the Coach. Pretty well off for work. They are dying in one pan today. I very seldom go to Stanningley

Shop<sup>1</sup> now. Begun to Whiten the top Chamber of the mill.

Yesterday my father set off for Hull. Carrier at Leeds with There was never a more unsettled Winter seen than this has been scarce ever been two days alike; it has been generally windy & wet. We are giving 2/9 Pr Barrel for wash; in summer gave 3/6 for about 90 Gallons.<sup>2</sup>

The Wind this Winter has all along been in the West, South

West and South, none worse for the Mill.

Leading the horse manure fair on to the brow of the Hill. We shall cover the better half of the field this yr. Freezes very hard

One of Davy lads broke his thigh this morning. Carred

him to the Infirmary at Leeds.

No very fair prospect of Work for next week.

Father came from Hull. 15

Still morning; Carrier at Leeds, Jnº at Leeds. 16

17

Fast Day.<sup>3</sup> Mill standing. Bar. 29,4. Ther. 42°. Dull morning Roads bad. Yesterday finish'd leading manure 18 on hill side Close.

Delivering notes for our pay Day.

Rather less work this Week—pans been very little used this 20

Upon looking our books over for the mill finds we have earned since it begun betwixt £1900 & £2000 and £1100 and upwards owing.

22 Dull morning wind east—There has been no drying Cloth these four or five Days back so that we are short of work in the Cloth Mill.<sup>4</sup> Roads never worse. All the pans in use. As poor a look out for trade as ever. Bramley trade seems rather to flagg Company mill people are sending upwards of £10,000 of Goods to the Brazils; it makes people venture very hard now as there is no port scarce open but it for Cloth.

Carriers one at Bradford the other at Leeds.

There were more coarse Cloth sold yesterday than has been

sold on one day this long time.

- 25 Cape Mill, Co. Mill, Thackray Mill and several others are buying Cloth for Scribbling<sup>5</sup>; was not it for that sho'd have a great deal more work than we have.
- 26 Dreizing<sup>6</sup> the lower end of hill side field. Plenty of work in the Cloth Mill.
- <sup>1</sup> The ware shop or ware-house, mentioned again several times, at which his father, a salter, stored his dyewares.
- <sup>2</sup> The liquor collected in the village used for scouring cloth. See also under Sept. 8, 1813.

<sup>3</sup> Ash Wednesday.

<sup>4</sup> The Cloth Mill, as he always calls the Fulling Mill.

<sup>5</sup> They were taking cloth from the clothiers in payment of their charges for scribbling wool for them.

<sup>6</sup> Dreizing. A draze is a bush-harrow, either branches (preferably of thorn) bound together, or twisted into a bundle, and used to spread the manure. 27 They are petitioning for peace some say it is for the better some say its for the worse.

29 Pretty fair for work this morning.

Mar. I One of our carriers at Leeds. I was at Leeds scarce any money stirring.

2 Fine morning. Our pay day for the mill at home.

3 Yesterday our pay day it was but a very indifferent day.

Fine morning wind west.

- 4 Very well for work this week. Wind changed to East. Dreizing hill side close. There were people sowing oats on the Ist of March it was Mr Sagers.
- 7 Very sharp morn. I was at Leeds this forenoon. Wrap'd our air pump¹ the first time it has been done since we begun. Very fine seed time at the present.

8 At Adwalton fair, bot a mare there for 20 Guineas. A

very poor fair for horses very few in.

- 9 Dull cold morning wind North. Yesterday leading stones for flagging a place to dry wool out of doors on. Snows a little this forenoon.
- 10 Dull morning Roads Dry. We are giving 40/- Pr Quarter for seed Oats.
- II Very well off for work this Week. Dreizing the hill side field this is the third and last time it's been done.
- 13 Trade continues very dull a very deal out of work. Sowing far side of Stanny Close with Oats. Dam runs over with a strong stream. Our Miller very poorly.

15 Very poor news from Leeds, there has been a poor Mark<sup>t</sup>.

16 One of Carriers at Churwell with Slubbing. Brot Coals Back. We begin to be very slack of work in the Mill—Chas. and us settled our accot. Flagging a place to dry wool on.

21 Cleaning and filling the Boiler this Morning. Likely to

have some trouble with Grainger—he's a troublsome Rascal.

22 Frosty Morning. Good quantity of Snow on the Ground. Very little to do either in Cloth Mill or Scribbling Mill. Near a stand.

23 Our Mill standing for want of work. Very like for snow.

26 Ground wet roads very Bad; clean'd a seak pond out.

28 Chas. [Lord] took our Bellows and old Iron at £20. Dryed the first Cloths of Wool on our Drying flags this Day—fine and

frosty Night.

- 29 Clothiers in rather better spirits—there has been a better Market for Cloth. Our Miller been poorly some time. Coals for our Mill for one year costs £230 including leading; we have burnt about 16 Loads p<sup>r</sup> Day on an avarage. We have Mill'd from the 25<sup>th</sup> March 1807 to 25 March 1808, 2601 Pieces of Cloth.
- <sup>1</sup> The air pump of the steam engine used to exhaust the steam from the cylinder.
- <sup>2</sup> Adwalton, four miles or so from Bramley, was the scene of a famous Horse Fair that attracted dealers and buyers several times a year from all parts of Yorkshire. See 'Notes on Adwalton Fair,' by Wilfrid Robertshaw in the *Bradford Antiquary*, Vol. V, Pt. 22, 1927.

Told Ino Varley one of our Carriers to look for a new place. I understand he has done so; it is the first time he has done as I

30 No seed could be sown this last fortnight back or now. Very throng in Cloth Mill. No Drought for [drying] Wool. 31 Snowy cold morning. Gave 10/6 Pr Strike for Lentils.

All the Scribblers standing but one.

Ap. 2 There has been more Cloth Sold today at Leeds than

has been for 6 Months past on one Day.

I have been told that Calverly Mill and Ross Mill has stood for Water this last Week, more than once; our Dam runs over a stream as thick as my thumb.

4 On the 2d Inst sowed our Lentiles the first Crop. Wind

Strong and droughty.

Most water mills in back Water. Corbett [of] Mansfield at our house. Seeking Money in finds it very scarce. A pretty fair Market for Cloth Yesterday. The Hosier[y] trade at Mansfield is very good.

7 Gave Notice to our Dryer and 2 Slubbers to leave on Satur-

day Night. A person came from Leeds to view our Mill from Mr

Blackburn's as we are going to Insure at his office.

8 Soft cloudy morning Wind West. No Drought for Wool out of Doors. Full of Work in the Cloth Mill. There has been no pleasant Spring weather this year yet always cold or rainy.

II Our Mill standing for want of work. Only One Cloth of Wool on the ground. Sowing Oats at home pasture. Bot some hay of Jas. Shires for Mill got some before.

12 Growing weather. Wheat begins to look well—Raking the

food off hill side close.

13 Jnº Exchang'd Cloth for spanish wool at Leeds; there is very little else but bartering one sort of good for another.

Took 2 Damaged pieces of Jacb Bennett at 7/- Pr Yd.

We have only 3 Billies going this Week-Many Clothiers Breaking now. Very little grass where the seak was laid yet. Saw a swallow the first I have seen this year.

16 At Leeds—There was a fine warm Morning got very near

3 Cloths of Wool dry on flags.

17 Easter Sunday cold snowy Day.

Ground all covered with snow—Very well of for work this IQ week. Many people breaking.

20 All the ponds froze over. Tipping and lining some of our

stocks.

Drifts of Snow a Yard deep—Wind North very wild. The winterlyest morn there has been this Year. Such a day for snow as I have not seen this long time.

23 Jnº went to Settle. Very Rugged and wet. Wheat looks ill in general. Roads bad. Very little work in the Mill, trade is

ill as ever. Money very scarce.

- 26 Gave a carrier notice to leave—at Leeds with cart.
- 27 Wind North no growing weather yet.

29 The finest & Warmest afternoon we have had this year; it rather begins to look like spring I think the wind is going to change.

30 Wind South first fine growing morn we have had this year.

May I Very fine growing day Wind West.

2 Our dam runs over with a stream as thick as my wrist.

3 At Leeds for drawback<sup>1</sup>; they may see grass grow almost.

5 Therm. this afternoon 70°. I fish'd with a line in the dam got a very fine Perch out threw it in again. Our Mill standing for want of work. Finish'd making a garden at the end of the houses. Wind East.

Thos Clough [of] Bramley made a Bankrupt he has made £1900

of Cloth in one year.

7 Trade as bad as it can be & money as scarce—

To Rather soft morning. We are pretty well for work this week we have only four Billies going. There is talk of a war between America & France.

12 I have seen fish spawn a Week since in our dam.

13 Dull morning there is very fair for grass to turn out to.

14 Found a very deal of fish when we set down in the stream of hot water.

16 Monday morn—turned our Beasts in to the hill side Close

Yesterday.

17 Flag'd the bottom of the Channel the hot water runs in—A Slubber left us this Morning call'd Jowett— At Leeds with Cart.

Mrs Marshall [of] Grimthorp came to our house.

Dam runs over a stream as thick as my wrist. Everything looks very flourishing & forward—The land belonging Bramley poor was let for £16; it was let before for £5 10s.; it will want fallowing as it is very poor and full of weeds—fences bad.

18 Mill standing to day—Went a fishing with line into the river

to Idle time away.

20 Carrier at Rooley with hay. Mill standing this afternoon.

23 Miss Dunn from Driffield at our house. 24 Mill standing—Very growing weather.

25 Two Cloths [of Wool] dyed in our pans this day have very little to do—Oat meal £3 Pr Load—I could find plenty of able men for 10/- Pr Week, such as once had 25/- and 30/- Pr Week.

26 Mrs Marshall at Low Moor Foundry—Rainy afternoon—

Scribbling Mill standing.

28 Mill standing. Turn'd a many of our men away—Paid less wages to Night by £12 than ever I have done since Mill begun.

29 At Armley with Mrs Marshall.

31 Very growing morning. Mrs Marshall leaves our house—An uncommon rainy afternoon. Water runs down that it wd turn a mill. I think it is the wetest I have seen this many years—

¹ Drawback on soap. There was a duty on all soap through the 18th century, but a rebate or drawback of one-third the duty was allowed on all soap used for textile purposes. Rogerson frequently mentions his visits to Leeds to obtain the drawback on the soap consumed in the mill.

Disturbances at Manchester—There is a deal of damage done with this heavy rain by the water flooding things away.

June I Dam runs over a stream as thick as my arm.

- 2 Mill standing for want of work—At Farsley this afternoon find all Mills nearly as bad as us.
- Found a many fish that had got out of the Dam Down the Weir. Mill standing—Showry afternoon.

  5 Mr Foster prech'd at Bramley. Father went to Ripon.

Mill standing part of this afternoon. 6 Only three pieces of Wool in the Mill.

Very wet Weather. Sale of Thos Clough's Goods to day. 8 Scribbling Mill standing this afternoon.

Our overlooker got Married. 12

Very well for work this week—The Ground very full of Wet. 13

At Leeds rather better market. 14

Fine Morning. Money very scarce. 15

All our pans going to day. 16

- Was at Bradford fair with a horse to sell. Wildish Day. 17
- People beginning to Mow-It does not look settl'd enough 18 for hay time.
  - Very well for work this week—Went to Boroughbridge Fair. 21

Mowing Mill close for hay. 24

People are throng Mowing—Benin Gaunt drop'd down dead at Leeds.

Mr Bushby<sup>2</sup> preach'd at Bramley. Very fine day. 26

27 Mowing Swinnow Close—Dam runs a strong stream over. Mowing four Acres on Swinnow. Got some hay into a small stack that was grown in mill close—There was a backward Spring but

very forward haytime and great plenty of grass.

29 Very fine hay weather. Mr Pollard is running with their

Engine. They have only newly begun to do so.

July I Dam runs over a stream as thick as one's thumb; very hot day.

3 Reports of the spanish fleet being deliver'd to us by the

Inhabitants.

4 Delivering Notes out for pay day—Leading hay out of Swinnow Close. Mill standing.

5 Rather better Markets but money very scarce—

Heard Mr Hainorth, Addle, tell of finding a Roman urn as they were digging on Black Moor with part Roman Coins in it; they also digged up many floors of houses—the Urn is in Addle Church.3

Very little work for the Scribbling Mill.

- 6 Scribbling Mill standing. Dam runs very weakly over. Mowing Green hill Closes. Dull Weather. Begun to mow our Lentils for Horses in Mill Close.
- <sup>1</sup> Rev. Rich<sup>d</sup> Foster, a Curate of Leeds Parish Church preferred to chapelry of Hunslet 1808.
- <sup>2</sup> Rev. Joseph Bushby, B.A., assistant Curate of Bramley 1804; in 1815 licenced to Holbeck, died 1870, aged 90.
  - <sup>3</sup> The Roman Urn is still in the Museum adjoining Adel Church.

My Uncle Jnº Rogerson Armley departed this Life—

Leading Green hill Hay. IO

Very little Work in our Mill—We finish'd hay time at home. Tried to buy some hay of Mr Waddington bade him 6 Guineas an Acre for it; it was in cock-

At Leeds fair. 12

Very hot—Wind West—Pay Day. 13

Leading our hay for Mill—Therr in my Counting house this afternoon 830—Leading hay for Mill horses.

At Armley Chapel.

Middling work in the mill. 18

Getting a Wheat Stack in Broad dike at Bramley town end 20 quite dry-

Our Dam gives over running out.

- Plenty of work in our Mill. Most Water Mills standing 22 for water.
- Rather wet this morning-Very heavy shower with heavy Thunder.
  - Very heavy rain some Thunder. 24

Dull day. Bramley feast.

Very rainy morning, at Leeds today. 26 Plenty of work in our Mill. Wild Day. 28

29

Our pasture nearly done. At the play rainy night. Hay that is out is in very bad condition. We begin to feel trade rather mend which is very unexpected for it was so flat that many said it would never rise more.

Aug. I Uncommon rainy morning. Heavy Thunder this

afternoon.

A fresh in the river—Carrier at Leeds with Cart. I never saw money scarcer, nor never more people in want of it.

3 Rather begins to grow scarce of work in the Mill.

hay to get and part to cut yet.

- 4 At Leeds for drawbacks—Saw them shearing Oats at Kirkstall the first I have heard tell off.
  - Fineish day, plenty of Work came in to day.
  - Corn ripens fast. At Bradford a Wet day. 6

Sultry weather. Mending soap pipe.

9 At Leeds to-day. Corn advances; Wheat 38/- per L<sup>d</sup>. Very bad harvest weather. Shearers begun to go into the Country a day or two since.

II Very throng in our Mill. Mowing Oats on Swinnow Close. Got part Wool dry out of doors. A Slubber left us. A great many

Oats Ripe. Got a fine Pearch out of our Dam with line.

12 Our dam runs over a pretty strong stream.

13 Windy & rainy Morning. Shearing Wheat in the great Close next our dam. Got a fresh slubber.

14 An Haystack burnt down at Red Coat worth £250 owing to getting it too soon. We are thronger in our Scribbling Mill than we ever have been since we begun.

Fine harvest morning. I have heard of two Mills that has stood for work this last week. Mr Long from Manchester at Leeds.

Dull Morning. Leading Oats of Swinnow.

Mowing Clover on Swinnow. 22

Rainy Morn. Got my toe Nail trap'd off. 23

Waddington's leading Wheat out of great Close. Got all Shearing Wheat. our Oats.

Rainy Day. Altering the Governor of Engine.

Pudsey feast. 29

Mill standing owing to Pudsey feast. Wild afternoon. 30

Sept. I Shot a Stock Dove rainy afternoon.

Sunderland seeking a Slubber; there is a deal of trouble with them dogs—

At Armley Feast—fine Day.

Softish Day. Leading Wheat of Swinnow. Got a New Slubber from Adwalton.

6 At Leeds. Money scarcer than ever.

Seeking in money—Finish'd Corn Leading.

Showry Day. Very little drought for Wool out of Doors. 8

Very Rainy day. Put a Tench in our Dam. 9

Dull morn, at Leeds with Cart; pretty well for work several Mills are slack. Markets rather better at Leeds.

15

Very fine day. Jnº goes to Harrogate. Droughty Weather. Our dam scarce runs over. Pretty well 16 for work in our Mill.

Mr Hodghson from Bridlington at our house. 19

At Leeds. Rather flat Market. Wheat 42/- Pr Ld. 20

Very well for work. They are great Rogues in Pudsey— Petitioning for peace has done no good, vice Versa<sup>1</sup>.

About 20 Cloths of Wool to begin on this Monday Morn. 26

Fine Morn, at Leeds with Cart. 27

There is Ice this Morning. Abmk Hainorth Sale; they liv'd opposite our Mill comical folks.

Fine Weather. Dam runs none over.

- 30 Gave Stanningley Ware Shop up. We have plenty of work. Oct. 3 Begun this Night to use our Lamps for Billies & Scribblers.
- 4 At Leeds today. I never saw such a scarcity of money in my life not a farthing to be got.

Dull day. Wibsey Fair.

8 On going into Pudsey among our customers we find there

is neither Money nor goods. Running short of Work in our Mill. 10 There is a very deal of Fog this year. 3 Cloths of Wool dyed in our pans.

II Fine Morning, at Leeds today. There is neither Work nor

money stirring.

12 I surely think these are harder times than ever was known.

<sup>&</sup>lt;sup>1</sup> Clearly 'Versa' is intended, but the spelling is quite uncertain—a series of loops.

Standing for want of Work this afternoon. It is a current Report at Leeds that Rich<sup>d</sup> R. Bramley Esq<sup>r1</sup> has fail'd. Leading Seak on to hill side Close.

14 Byram at Wakefield on account of a piece that is too Narrow of Mark Stephenson's. There is talk of Alderman Cockson<sup>2</sup> being broke. We begin to have rather more work in the Mill.

16 Sunday. Dying two Cloths of Wool over for Ed. Wright

in the Night that was bad Colours.

17 Clayton Heights<sup>3</sup> White with Snow.

19 M. Gaunt & me at Bradford. Wild afternoon.

20 Finish'd Making my notes for our Pay Day. Fine day.

Perigo who has been pretended to be witch'd; under such an Idea he has had dealings with a woman these 2 Years; she has got from him Money & goods to the value of £123, under various pretences; she has caused him to travel to Buxton, Chester and Manchester on foot while blood came out of his shoe tops; she has poison'd his Wife and has taken the use of his Limbs from him the same way to relate all would fill this book; she is now in Wakefd house of Correction now till Leeds Sessions. She is the deepest Monster of a Woman I ever heard off. She has got his Money, his China, Silver spoons his Wife's Cloths, all his Cloths but an old top Coat on his back. She has got his bed and bedding so that he has only a smoothing Cloth to lie on; he has not tasted Meat these 17 Weeks he is very near starv'd to death.<sup>4</sup>

24 Soft Morn. Delivering our Notes for our Mill pay day.

25 Very wild & very wet weather. Dam runs over. We are pretty well of for Work at the present—At Leeds with Cart.

26 A Tempestuous day. Roads bad. Rather throng in our

Mill. Jno at Ripley to look at some Wool.

27 We are running from 6 o'clock in the Morn to 9 o'clock at Night in the Mill.

I think most Mills are pretty throng.

30 Dull day. Potatoes 7/6 Pr Ld, 15 Stone to Load.

31 Fine day. At Bradford this morning. Dam runs a strong stream over. There is a better lookout for trade than has been for some time back. The Cloth that our customers sold [us] for scribbling is nearly work'd out which makes us rather thronger in our Mill.

Nov. I Misty Morning. At Leeds today with Cart.

- 2 Our pay day. Sale of Abmk Hainorth Land and houses.
- <sup>1</sup> He was Mayor of Leeds in 1792 and 1806.
- <sup>2</sup> Another leading Leeds merchant, Mayor in 1783 and 1801.
- <sup>3</sup> The high land beyond Bradford, eight miles away.
- <sup>4</sup> The full story of Mary Bateman, the 'Yorkshire Witch,' is told in Baring Gould's 'Yorkshire Oddities.' Half a century later the *Bramley Almanac* had two entries—'May 24, Mary Batman poisoned Reb. Perigo, 1807' March 20, Mary Bateman hung for murder, 1809.' Perigo himself lived on for years and is again mentioned in the Diary, being made letter carrier to and from Leeds.

Our pay day for Mill; there has been a very poor one we have  $rec^d$  about  $\frac{1}{6}$  of what we have owing.

Went to Leeds for drawbacks; they were not paying. Coffee

2/6 Pr lb.

4 At Leeds today again for drawbacks forced to come without for being too late—We had two Merchants to buy Duffels in our Mill to-day; while they [the pieces] was in the stock[s] they sold some for Cash.¹ We are very well off for work at the present.

Snowy & Rainy day. Got drawbacks today.

8 Leeds fair.

- 9 Dirty Roads. Cattle dear at Leeds fair tho' a many in. In Pudsey today seeking money; we find very little but plenty of trade.
- II Dull & no Drought, running in our Mill till II o'clock to Night—Some of our Slubbers are making as much as 7/ Pr Day if not more. Slubbers & Childer laid in Mill all Night.

13 Got bled today for the Head Ach.

15 Soft Morning. Making Seven days in the Week in the Mill.

16 We have had the Mayor of Leeds and Mr Gott at our house for several hours examining the Witnesses respecting Rebecca Perigo the Wife of Wm Perigo who without doubt died by poison administered to her in a pudding in a most extraordinary way by Mary Bateman of Leeds.

A great call for Cloth of a very thin nature called pellin Cloth

they are made in the White.

17 Broke our Willy; at Eccleshill for Chas. Lord. 18 Running all night in the mill. Very Rainy Day.

19 Scribblers and 4 Billies has earned this week £57 10s.; they have work'd very hard indeed.

21 Wild Morn. Setting a new Slubber on.

22 Fine Morning. Arrested Thos Hollings Calverley.

23 Reported that the Spaniards have defeated the French and taken Bilboa—a lie.

24 Very throng in our Mill—Woollen goods sells low in the Brazils so the newspapers say.

Very throng in our Mill. Planted a Row of oak trees in our orchard at home. Jno gone to buy Wool at Settle.

27 Our Fireman got Married.

29 Father sets out for Burlington. Uncommon throng in our Mill. There is very little Drought—Roads very bad. We have had persons to beg to have Wool Scribbled I once tho't I never sh<sup>d</sup> see such a time.

30 Jnº gone to take some Wool up at Settle.

Dec. 3 All the Mills in backwater. We have earned more money with only the Scribbling mill than we have ever done on a Week since We begun—Pd the Slubbers for a fortnight £16-10-10 there is 5 Slubbers. We have done 44 Cloths [of Wool]; they come to £69.

<sup>&</sup>lt;sup>1</sup> The meaning is that the merchants bought for cash some cloth that was still in the fulling stocks.

4 Very fine Day—Packing Piston.

8 Wild Weather but droughty—We are slack of fine Work in the Mill—Switching and Ditching low [h]Edge in Mill Close.

9 Bradford fair—Heard Sam¹ Myers Mason say [that] when repairing Tadcaster dam they found a great many human Skeletons near the Surface on the Church side of the Water opposite the Damstones—they also found a very long Sword. Bot a horse at Bradford fair for £27. We have got cheated he proves to be a stallion but he is like a good workman.

Killing two oxen in our Cloth Mill.The French Defeat the Spaniards.

12 The Oxen bought at Bradford stands to 7/ Pr Stone; we bought a hind Quarter for 6/3 Pr Stone. We are not so throng in our Mill as what we have been. The fine open and Mild Weather is beyond everything I ever remember for the time of the year.

14 Fine still morning. Our Dryhouse burnt down and 3 Cloths of Wool—There is burnt to the value of £168 in Building & Wool.

15 Very Cold part Sleet—Begun to rebuild the dryhouse; the [re] was 9 Cloths of Wool in the drys which was sav'd—it has let very ill¹ we have a deal of Wet Wool by us.

16 Father came out of Holderness last Night.

17 We are drying Wool at Jn<sup>o</sup> Lister Mill it is very kind of them.

18 Sunday filling and cleaning Boiler; we found on examining the boiler that there is several holes burnt through in one plate—Drying Wool at Lister Mill and Jas. Dickinson Dryhouses.

19 Very frosty. Mending cold Water Pump. We have deal

19 Very frosty. Mending cold Water Pump. We have deal of Wool by us. It is impossible to Build anything while this frost

is so intense.

20 Fine Cloth has gone pretty well off today owing to Bonoparte having got possession of Spain again; Spanish wool [it] is supposed will be 2/ or 3/ per lb. higher.

22 Sent a Hare and a Goose to Mr Schofield London.

24 Things begin to want repairing in the Mill; we have had nothing to do of the kind before now but we find we shall soon want a little doing here and there—The Thermom<sup>r</sup> I have gone bye in this book was a Spirit of Wine Ther. I have got one fill'd with Quicksilver & I find this last I have got to be 10 degrees higher so one of the two must be wrong. The weather out of doors by the New one is 52°. The Water in the well in the field is 61°. Mr Wetnell from Low Moor Foundry Din'd at our house to-day—Mr Hodshon preached at Bramley.

Dec. 25 Wine Ther. 38°, Quick. [silver] Ther. 55°. Deal balks is worth 7/ or 8/ p<sup>r</sup> Foot in Leeds, we are forc'd to buy Dutch Elm for our Dry house at 2/ p<sup>r</sup> Foot as we hope it will answer it

being not so wide.

26 Snowy Morning—At Leeds with Cart.

27 Changed the Quick Silver Ther. for another as I thought

<sup>1 &#</sup>x27;let' from verb light or lit; a Yorkshire expression meaning it has happened or fallen out very ill.

it was not true. So I shall in future make my observations from it, it seems very exact the other was far from it-Our Slubbers Drinking two days. They are unreasonable Dogs but very good Workmen—We have plenty of Work. We have had no drought for Drying Cloth these 3 Weeks back which makes our Cloth Mill slack of Work—Better News from America the Embargo which has been on a Year is likely to be took off.

No Drought—No Work for the Cloth Mill. Delivering Notes out for Ware pay Day-running in the Mill till II o'clock at Night.

The foundations of the dryhouse is not out of the ground yet

owing to the frost.

Clothiers not so difficult to please as I have seen them they wait

rather more on themselves.

Work has been so scarce this Year that Bramley townspeople took a cut<sup>1</sup> to Dig of Mrs Charnock, Monkton Moor, for the poor people to go to work at but part staid at home and pin'd before they would go, others made a pretty good Job of it.

29 Several Mills in back Water—Water in the Well in the

field 46° Air out of doors 36°.

31 Plenty of Work in the Scribbling Mill most Drabs of any Colour.

Book 2.

[On inside of cover] Something after a few more years may perhaps be found either instructing or amusing

Jany 1844 Josh Rogerson

## **MEMORANDUMS**

TAKEN BY JOSH ROGERSON AT BELLISLE MILL

1809 BRAMLEY

Jan. 1 The Number of Pieces up to this Day is 1845 I mean from the 25<sup>th</sup> March. It would have been a deal larger but for this Slack Drought. Mr Hodghson Preach'd at Bramley—Very bad Roads—

Between 6 and 7 o'clock on Sunday Night our Scribbling Mill which had a deal of Dry wool in took Fire but was got out without much Damage. It was occasion'd as we suppose by a Salv'd Cloth of Black Wool Dry which heated to that degree; every circumstance tended to corroborate the opinion. I believe it wd have been burnt to the ground but for a little lad and Lass of the Overlookers and Millers they happened to say there was a light in the Mill.

All things seem to go on well this Morning—All pans in use.

Dull Snowy Morning. No Drought. Cart at Leeds. Coarse work begins to grow slack. Money does not seem plentifull at Leeds

Dull thick Snow—Our ware pay day. I think the Sun has

<sup>&</sup>lt;sup>1</sup> A cut is a drain.

not been seen here this 15 or 16 Days—A most terrible Winter's day. Our pay day which sho'd have been a good one has been the worst we ever experienced perhaps it may be owing to the extremity of the weather.

5 Wild snowy Morn—it is 10 Years since we had such an heavy

snow, most of the Coaches stop'd.

Work begins to grow slack owing to the Want of Drought. Jno Lister says we are to dry no more at their Dryhouse. A very rugged Night. None of our Slubbers earning less than 21/ Pr Week. I think we should have plenty of trade but for the slack drought—Our Slubbers Average Wage for the last year is 22/6 Pr Week—Cloth Mill standing—Running to 10 and 11 o'clock at Night in the Scribbling Mill.

6 No drought yet—Rainy Night. We have dryed 95 Pss of

Wool at Lister Mill.

7 Slack of Coarse Work in the Mills—Stop'd this afternoon in the Mill for want of Coals—We have about 12 Cloths of Wool bye us this Saturday night—I have seen us a good deal worse. No drought yet.

8 Dull Misty Morning. At the Chapel—Wind chang'd to West Bar. geting up to Night think it is going to clear up—Waggons

coming down to Night that have been stopt by the Snow.

9 Beginning to build our dryhouse up never had an opportunity of doing anything at it since it was burnt down only we had the first row of Foundation stones laid. Had the Tinker to repair our Lamps, Lanthorn, &c—Drying Wool at Jas. Dickinson's and Jas. Hudson's Ross Mill—I hope to return them the favor at some time—Only our 3 Fine Billies lighting at Night—Reported that R. R. Bramley Esq<sup>r</sup> has hang'd himself.

ro Very little money at Leeds to-day.

rr Pushing on with building Dryhouse. Recd Newton's Note for Coals—Slack of Work in the Mill—Part drought to-day. Glass Rising—Frosty Night. Sunderland in Pudsey seeking in Money—I think we are likely to have a trade this Spring—there are better prospects both from Brazils and America.

Finish but not much drought—Slubbers not lighting to but have seen us a great deal worse for Work. Our team leading stones for Dryh<sup>s</sup> from half Mile<sup>1</sup>—About a fortnight ago the[re] has [been] a Coach run between Leeds and Bradford on Tuesdays

called the Leeds Market Coach.

13 Dull with part Sleet—No Drought yet.

14 Fine & clear a deal of drought to day—Carrd 2 Cloths of Wool to Chas. Wood's to get dryed.

16 Not very much work in our Mill—Carr<sup>r</sup> at Bradford for Wool.

17 Dull Morn—pretty good Market for Cloth at Leeds.

18 Fine & frosty—Pretty well for Work—Our dam froze over for the first time. The Water in the Well in the field 45 deg. Our Mill Standing this afternoon not for scarcity of Work but for want of Dry Wool—Agreed with Benj<sup>n</sup> Roberts to deliver us coals as

<sup>&</sup>lt;sup>1</sup> Half-mile Quarry in Bramley, on or near Swinnow.

they go to Leeds &c at 10<sup>d</sup> Pr L<sup>d</sup>—5 Strikes<sup>1</sup> to L<sup>d</sup>; if we order them to come on purpose we pay for them IId Pr Ld; we however shall take care not to order many. Dryhouse at a Stand owing to the frost.

Dull and frosty. All pans in use.

We dry part Wool at Cape Mill. Throng in our Mill. 20

Fine day but not much drought. 21

23 Very droughty & clear. We had 13 Pieces of Wool Dyed in our pans to day.

Ground covered with snow. Snowy Day.

A great Snow last Night. Reports of the French having

defeated our army in Spain and kill'd Gen. Sir Ino Moore.

Strongish Wind, heavy snow in the Night it has stop'd all Coaches and I may say allmost all sorts of Carriages—It thaws freely this Morn & Rains freely. Finished our hay at Mill. Bo't some more of Wm Threapleton for £6.

27 A Meeting of all the Master Scribblers to day at Mr Spinks Kirkstall Bridge in order to Regulate the Scribbling business<sup>2</sup>—There

were Master Scribblers from 17 different Mills-Repairing Stocks Machines &c in Mill.

Soft dull day no drought—At Calverly Mill to-day, they are

all in backwater. Very rainy afternoon.

31 Got dryhouse ready for Rearing—1520 Yds is one Skean3 of Woolen Yarn—Benj<sup>n</sup> Robinsons of Bramley are the unreasonableest people that ever liv'd in a town.

Feb. 1 Last Night & this Morning very rainy—Rearing Dry-

house.

- Slating Dryhouse—We cannot boast of being throng in our Mill but have seen us worse.
  - 3 Another Meeting of the Scribblers at Kirkstall Bridge nothing

- effectual has been yet done.

  4 Water Mills have been more in Backwater this week than ever they were known to be-The finest Night I have seen this long time.
- A strike is a measure of corn, peas, &c., that is made level with the top of the container by being smoothed with a strickle. The actual value varies locally and it is uncertain whether in the West Riding a strike of coal was equivalent to one or two bushels.
- <sup>2</sup> The series of meetings of Master Scribblers were held at the old established Star Inn adjoining Kirkstall Bridge. A loose sheet preserved in the Diary consists of a long printed circular letter by 'A Brother Scribbler,' and on the back a rough draft of the proposed prices submitted to the meeting held on Feb. 20th. These prices are set out under that date. Rogerson also preserved his summons to one of the meetings, as follows:—
  Mess<sup>rs</sup> Rogerson & Lord.

Gentn

You are desired to attend a meeting for the better regulating of the Scribb  $^g$  Business which will be held at  $M^r$  Spinks Kirkstall Bridge at One o'clock on Friday the 20th Inst. By order Yours &

Jan. 16<sup>th</sup> 1809.

a well wisher

<sup>3</sup> A skein of yarn, though of fixed length, varied in weight according to its fineness. The 'count' or measure of its fineness was the number of skeins produced from a wartern or 6 lbs. of wool.

6 Rainy Morn. It is the wettest time I ever knew. There is such a scarcity of Spanish Wool as never was known. London Riders<sup>1</sup> are coming to buy it of the Clothiers they are giving for some sorts 18/ Pr lb; cloth is past getting for Money of that description.2

7 Rec<sup>d</sup> the Money for our dryhouse that was burnt from the

Eagle Fire Office.

8 Putting floor up [in] Dryhouse. Fast Day. Burying Jon<sup>n</sup> Greenwood an old faithful Servant that was ours & liv'd at Leeds.

Laying plates in Dryhouse—Chas. Lord at the Low Moor.<sup>3</sup> No Drought. Bad Roads. Plastering our Dryhouse. An uncommon rainy Night.

Rather slack in the Scribbling Mill—Never saw roads worse

nor less Drought. At Fulneck.

14 Finish day—Slack of Work. Laid the first Wool on to dry in our dryhouse since it was rebuilt.

15 Tolerable fine Morning—Our dryhouse when it feels to be

in nice drying order is 142° by Farint Therm.—

16 Rather Wild but a fine droughty day. Jno gone to Colne. with Jane Dickinson Who has got Married to day with a person of the Name of Duckitt a Linnen draper.

- 17 Wild & Cloudy. At the Rotation Office.<sup>4</sup>
  20 All Billies Standing—Another Meeting of Master Scribblers at Kirkstall Bridge for Advancing the prices of Scribbling but there was nothing effectual done.<sup>5</sup>
- <sup>1</sup> An unusual and obsolete expression: commercial travellers sent down from London.

What he means to say is that 'cloth of that description,' viz. made from Spanish wool 'is past getting for money.'

<sup>3</sup> Low Moor. There are later references which make it certain that Chas. Lord's visit was to Low Moor Ironworks in connection with machinery or iron castings, probably the plates for the new dryhouse.

<sup>4</sup> The Rotation Office in Kirkgate, Leeds, was so called from the Aldermen

attending at it in turn for the administration of justice.

<sup>5</sup> Some partial agreement was reached, for prices have been inserted and alterations made in the draft of the report of the meeting preserved by Rogerson. "Kirkstall Bridge, 20th Feb 1809

"Mr Wm Field in the Chair at a Meeting held this day at the house of Mr Spinks it was unanimously agreed by the Undersigned Masters of Fulling & Scribbling Mills that we will not undertake to doe any work for less than the following prices after the 25th of March next For Wool

12<sup>d</sup> Wartrn Slubg is 6<sup>d</sup> Scribbling — 18  $D^0$   $D^0$  is  $7^d$ 

and so on in proportion—not to do any colourd Wool for less than 8d Wartn Slubg nor 5d Scribblg—1/1 in all

Willowing to be 1/6 Pr Cloth --- 2/-Drying  $D^{o}$ \_\_\_\_ 2/-Dying For White Wool

Scribbling & Slubbing—the lowest price to be I/- Pr Wartn Listing to be charged for after the same price I/- Pr Do Fulling Coloured Cloth 2/6 for the Stock Pr Piece at any length Coarse White Cloth 1/9

Wild & Cold at Leeds to-day.

- Wild Morn. Finishing Notes for Mill pay day. 23
- Still Fine Morn. Delivering Notes for pay day. 27
- Fine & frosty—Drying Wool on our Stones out of door for the first time this Year. Pretty well for Work; Cloth Mill uncommon throng we don't know whose to take the first.

Mar. I Put papers up at our Mill door saying Drying and Dying is to be 3/ Pr Cloth, Milling 5/s—

Very sharp frost. At Leeds to day

- Our pay day for Mill. Mrs Waddington Sowing beans in great Close next our Mill.
  - Rather Misty. At Low Moor to day. IO

IIMisty Morning—At Leeds to day.

Dull & Cold—Jnº at Bradford. 12

- 13
- Draining hill side Close. Jno went to York Assizes.<sup>2</sup> Very fine Spring Weather. Roads fine & Dusty. т8 Dull Still Morn. At Leeds today with Cart. 21

Plenty of Work in the Mill. 22

Very fine Morning. Grass growing fast. 25

- Very deal of Work in the Mill—We have been drying Wool 27 out of doors for this Week or more.
  - At Leeds today with Cart—Wheat looks very well. April 2 Easther Sunday. Sharp showers of Snow.

Getting Seak on hill side Close. 3

Fine & Frosty. At Leeds today with Cart. 4

Fine & Frosty getting Seak out. 5

Very well for Work—Getting Seak on to hill side Close.

Leading Seak on hill Side Close. 8

- Dull & like for rain—Well off for Work in the Mill. IO
- At Leeds to-day. Only an indifferent Market for Cloth. II
- Wild & Rainy—Dreizing hill Side Close. 13 Rain & Snow. Cleaning our Boiler out. 16

18 Wild day. Not at Leeds to-day.

- 21
- Frosty Morn. Making a Well on hill side Close. Fine Morning. Very droughty but not very growing. 24

Fine Spring Morning. At Leeds today. 25

26 Finish'd Digging the Drain hill side.

Not very growing weather. 30

May I Wild & wet. Ino at Leeds. Slack of Work in Mill.

At Leeds today. Mill standing for want of Work.

Seeking Money in did pretty well.

- Slack of Work in the Mill. At Leeds this afternoon. 4
- Mill standing for Work. Very bad growing weather for the time of the year.

The nicest spring morning we have had this Year.

- <sup>1</sup> A warning note is again necessary that 'Cloth' means a cloth of wool, whereas the charge for milling carried on in the 'Cloth Mill' was per piece.
- <sup>2</sup> He was a witness in the trial of Mary Bateman, which commenced on the 17th.

- Very slack of Work in Mill—I was balloted for the local Militia.1
  - 9 At Leeds today with Cart. Mill standing for want of Work.
- 10 Fine and warm. Very droughty-Wheat looks well. Got 3 very fine Perch with line out of our Dam.
- II Little to do in Scribbling Mill. Dam given over running over a Week since.
  - Very fine & still. Mill Standing for want of work. Went to Leeds to get sworn in for the local Militia.2
  - 17 Fine & Warm—Rather better for Work this Week. Un-

common Droughty Weather.

Fishing our Dam with Net got 8 fine Roach and Dace got also a few Perch but threw them in again as we only wanted to destroy

18 We are for going to Bradford every Thursday<sup>3</sup>; we have gone for the first time to-day.

19 At Bradford to Day. Thunder.

- 23 Disturbances at home with Jsh Pickles owing to an old house next our Croft.
- 24 Father gone to Leeds for 2 Warrants for Jsh and Jane Pickles for throwing our Wall down.

Accounts recd from America that the Embargo was taken off & every thing relating to America decided so we have a free trade there now.

- 25 Work middling plentiful in our Mill. Cart at Bradford. Dam 5 Inches within bank it never has been so before.
- 26 Father and Jno at Leeds Rotation office with Jsh & Jane Pickles—A rainy Night.

- 27 Very growing morn. Put 4 Gold Fish in our Dam.
  29 Growing Morning. Matthew Gaunt at Bramley from London. Pretty fair for Work in the Mill this Monday Morn.
  A great many dies now both Children and grown persons, it is a kind of fever—Bot the little Straw Thatch'd house situate at the Corner of our Croft of that Villain called Jsh Pickles; it was occupied by a poor Man who had lived in it for 50 Years back his name was Jerh Procter a Stuff weaver; it was the only straw thatched
  - <sup>1</sup> The local Militia formed in 1808.
- <sup>2</sup> In Consequence of a Precept from the Chief Constable of the Borough of Leeds, I do hereby give you Notice, that you are chosen by Lot, to serve in the Local Militia of the West Riding of the County of York, and that you are to appear on Monday the 15<sup>th</sup> Day of May, at the Moot Hall in Leeds, at Twelve o'clock at Noon of that Day, before the Deputy Lieutenants of the said Riding, then and there assembled, to take the Oath appointed to be taken by every Person chosen to serve in the Local Militia of the said West Riding, as a Private Militia Man.

Given under my Hand this 9th Day of May in the Year of our Lord 1809. Samuel Holmes Constable of Bramley. To Joseph Rogerson Drysalter.

<sup>3</sup> Thursday was Market Day at Bradford. As a scribbling and fulling miller Rogerson had no interest in the worsted industry, but evidently he hoped to build up a connection there amongst the woollen clothiers; there is no evidence that he did.

house remaining in Bramley—A many people said when Jer had [it] that it had more privelidges than it really had I am afraid they will turn tales now—We have a bad neighbour at the top of Bramley no town is more malicious against those who wish to thrive.

The Moors upwards cover'd with snow.

At Leeds to-day. Pd for the old house to Jsh Pickles.

31 There has not been so much rain as to make our dam run over-Very growing weather. Got a very fine trout out of our Dam with line. Broke our Willie.

June I Very rainy. Dam runs a strong stream over—Mending the Willie and sharpening it.

At Leeds to day rather better Market for Cloth.

At Fulneck with Mr Oddie from Liverpool.

Very Rainy day—At Eccleshill to day to buy a horse—I don't know that I ever saw such a wet time at this time of the Year—Pretty well for Work.

6 At Leeds to-day—A good market for Cloth but very little

money.

Cape Mill standing for Work. Work scarce in general. 8

In Pudsey to-day buying Cloth. 9

IO

Jnº at Ponterfract on M<sup>r</sup> Oddy's mare [?]. The two late Markets for Cloth have been very good. 12 At Leeds to day. A pretty fair Market for Cloth. 13

Bot a Gallaway at Pudsey. 15

Wild Day—At Leeds for Drawback. 16

Very Wild weather with Showers—Bradford Fair. 17

Fine Morn-pretty well for work in the Mill-Markets for

Cloth have been pretty good lately.

- Some Maliceous Rascal has thrown three stones through three panes of Glass in Scribbling Mill Windows sometime last night or early this Morning-Carrier at Leeds with Cart-I understand by the Clothiers there has been a very good Market for Cloth to day.
  - Fine droughty Morning—People has begun to Mow. 21

Very Warm & Still—Sowing Turnip at home.

Fine Weather—Leading hay in Bramley.

Fine day. Delivering Notes for pay day-Mowing on Swinnow Close—Plenty of Work.

28 Fine Wool uncommon scarce and dear.

29 Dam runs very slightly 'over—One of our carriers at Bradford. July 2 The Arch Bishop of York confirming at Leeds to day.

Putting a new turn into one of our stocks—Plenty of Work in the Mill—At the play to Night—very ill tir'd of it. Rainy coming home.

At Leeds to day. Money is scarce yet.

5 Our pay day for Mill—Tho' trade is pretty good we only have had an indifferent pay day-

10 Leeds fair. Very Wild weather for the time of the year— Plenty of work in the Mill.

I will here give [you]1 a specimen to what a pitch Clothiers have got to in this day2—One of our customers named Jacb Bennett happen'd to say to our head Miller that he knew of some cheap wool to sell but was short of Money; the Miller sd he had £40 by him which [he] wd not want before the two months end if he cd pay him at that time it was at his service; which no one can but think was kind beyond everything: last week according to promise he brothim the £40 of which he wanted to borrow £5 again; our Miller s<sup>d</sup> he w<sup>d</sup> have no objections to lend him it but he had taken so little this pay day he cd not pay his own bills for the Soap as usual: now hear the ungratful person what he sd to my brother at Leeds: he sd as he wd not lend him the £5 and miss his own payments he wd think of him and take care and send part of his Cloth to other Mills—These are the fruits of doing kindnesses to Clothiers in this day.

Our Slubbers at Leeds fair—Fine Evening—Leading hay of

Swinnow to home the first they have led this Year.

Very fine day—At Leeds today—

Fine hay day but rather Wild—Mowing middle Close at home. Chas Lord in Pudsey seeking money; need I say we always find it scarce there—Plenty of Work in the Mill.

13 Fine hay morning—Leading hay from Stanningley Close.

Carrier at Bradford with cart.

16 Mr Brooke of Holbeck preach'd at Bramley Chapel—he does not hold out many inducements for one to go and hear him.

- 17 The wildest & unpleasantest weather I ever saw for the time of the year but it is droughty. Jno at Low Moor Iron Works with some Money. People throng in their hay. Plenty of work in the Mill.
- 18 Carrier at Leeds with Cart. There has been a pretty good Market for Cloth—I think our Carrier has more beef than wool in his Cart. The weather is so very cold that was it not for the trees & Corn we shd scarce know it was summer. We have Wool in the Scribbling Mill that will serve us working a Week-Leading green hill hay home.

19 Finish'd leading hay both for Mill and home.

We have got our hay pretty well.
Plowing the ground at the end of the Mill for fallow. Water mills begin to be slack of Water-Our Dam begun to give over running over a week since. We stack the hay for the Mill at home to year we suppose it is a saving plan.

22 Fine & warm weather. The throngest part of hay time over—Burying Joshua Wood of Bramley. We have wrought from 5 o'clock to ½ past 8 all this Week—We have earn'd £106

this last fortnight.

23 Very fine day. Bramley Feast.

<sup>1</sup> 'You' has been written and then struck out.

<sup>2</sup> The narrative is a string of sentences without any stops at all. To make it intelligible colons and semi-colons have been introduced as the simplest remedy.

Mill running and men running away.

25 Droughty day. At Leeds to day not so much Cloth sold owing to a report that the French have defeated the Austrians on the Banks of the Danube-The French News say they have killed 50,000 of the Austrians while they have only 1500 killed the inequality of the Numbers makes us hope it is an untruth.

26 Harrowing this piece above the Mill. Money very scarce—

Barr lowering. Mrs Ducket from Colne at our house.

28 Trying how many load of Coals we burn in the day at the Engine only; we find that we use 11 loads every hour. Delivering notes out for Ware pay day.

Aug. 2 Our Ware pay day at home it was a very poor one.

4 They have (h)as good (h)as the Devil to deal with (h)as Clothiers at this day; they are Stupid Ignorant Roguish Rascals. Plenty of Work but little money-Reports that the Non-intercourse bill has taken place in America between [them] and this Country. I hope it is not true.

There is not any Corn likely to be ready to cut in this quarter

this fortnight or three weeks-Ino at Doncaster Fair.

Ino came from Doncaster. I understand there was much Wool in the fair but there were plenty of buyers and it went high.

Mr Long from Ferry bridge at our house.

Cart at Leeds. Poor day for Money.

Fine & droughty. Plowing this piece above the Mill—Plenty of Work in the Mill.

Begun this Morning by 5 o'clock in the Mill. Our team leading Seak on to Swinnow.

II Put another Tench in the dam; those I have put in have all com'd out of the River Air. Leading Manure on to Mill close.

Waltr Farrar Sold his place called the Gannas<sup>2</sup> to Mr Oddy for £1000—it is well sold—Put another Tench into our dam this afternoon I never heard tell of any coming out of the Air before those we got from there—they are a rare fish.

Very rainy Night. Ground very full of wet. Shearers beginning to go to shear. Heavy rain afternoon.

Very rainy afternoon—No Corn ready to cut in this Country

yet.

Work plentiful in the Mill. At Leeds today—finds Money very scarce. Though there has been so much rain fogg<sup>3</sup> is very thin in general.

16 Father and Mother sets of for Bridlington Hull and Grimthorp.

- <sup>1</sup> The Non-Intercourse Act putting an Embargo upon trade with France and England was passed by America in 1809, in an endeavour to protect its own rights that had been infringed by the combatants. It proved to be as ineffective as previous measures and was soon repealed. But the grievance remained and in 1811 by enforcing a prohibition of intercourse with Great Britain the United States greatly reduced British exports to America. The Luddite riots in 1812 were the immediate consequence of the distress in the woollen industry caused by the loss of the export trade to America.
  - <sup>2</sup> Ganners, in Broad-lane, Bramley.

<sup>&</sup>lt;sup>3</sup> Fog, the aftermath in the hayfields.

A Bulletin issued by our Government which we have rec<sup>d</sup> this Morning says that S<sup>r</sup> A. Wellesley and Joseph Bonaparte has had an engagement in Spain & have killed 10,000 of the French troops; we had 801 kill'd 3913 Wounded 653 Missing. M<sup>r</sup> Beckett Son Leeds is kill'd in this engagement<sup>1</sup> and one of M<sup>r</sup> Walker's, Killingbeck Hall—If this account be true they have had 12 Men and upwards for our one slain.

Plenty of Work in the Mill-Rainy afternoon.

17 Rainy Morning—Sam Myers Bramley putting a Bow Window into our Kitchen at home—We are running in the Mill from 5 o'clock in the Morn till we can see at Night. A person of the Name of Josh<sup>a</sup> Fearnley has com'd to live in those houses opposite the Mill where Ab<sup>h</sup> Hainorth formerly liv'd.

18 A great deal of Corn Mildew'd.

Some little Corn cut in this quarter but it can scarce be called the beginning of harvest it is so little—Corn ripens very slowly it is so cool—Our Overlooker in Pudsey endeavouring to find out a Cloth of Wool of Jn<sup>o</sup> Brook's which Jn<sup>o</sup> Brooke says has been delivered to some other person; he says that [which] we have deliver'd him is not so fine as his by 5/ or 6/ Pr stone; they were both Coppers.<sup>2</sup>

Jnº Brooke is right we found that we had got it ourselves in a Mistake and he had got ours owing to both his wool and ours being put in two sheets of our own. Pretty good Market for

Cloth to day at Leeds.

24 There is not a sheaf of Corn cut on that part of Bramley Common called Hough or Swinnow—Work plentiful in the Mill—A Carrier at Bradford with Cart.

25 Dull rainy Morning—Bad harvest weather—Continues to

be rainy & Close.

28 Fine day—Pudsey feast. Mill standing to repair; putting new Cards on to fancys the first we have worn—We have plenty of work to go on with in the Mill—A Bull Baiting at Pudsey—

29 Standing today. Mending seat of the Boiler.

- 30 Rain this Morning—I wish the devil had him who first instituted feasts.<sup>4</sup> Father & Mother came home from Hull and Grimthorp last Night. Only our Scribblers and Stocks Running to-day. Our Slubbers have not given over feasting yet; they have done nothing those three days past; they are a set of clever fellows.
- <sup>1</sup> The Battle of Talavera, fought July 28th, 1809, and the death of these two young officers is commemorated by a monument in the Leeds Parish Church. "On the south side of the chapel is a Cenotaph by Flaxman representing a weeping figure of Victory, life size, seated on a cannon, supporting her head on her right hand, which rests upon a banner inscribed with the word 'Talavera' between two wreaths."
  - <sup>2</sup> Coppers, *i.e.*, had been dyed copper colour.
- <sup>3</sup> A sheet is the bag holding the wool; hence a 'sheet of wool' is equivalent to a 'cloth of wool.'
- <sup>4</sup> The sentence has been crossed out; but he gives further expression to his annoyance below.

I doubt I shall see some of them be glad to work when they cannot get any.

31 Pretty fine day—There has been a very fine harvest day. Working away in the Mill today, likely to have plenty of work—

Sept. I We have near 800 Load of Coals in the yard to face winter with—Very fine harvest day—We have not cut one sheaf of corn yet—Money very scarce.

Running in the Mill by 5 o'clock this week.

3 Heavy rains this Morning—Armley feast. Farsley feast.

4 At Armley feast to-day—Part Rain.

- 5 At Leeds to-day—Good Market for Cloth—Money uncommon scarce.
- 7 Corn is in a very poor condition. Continues to be very rainy.

England thy weather's like a Modish wife

Thy Winds & Rains maintain perpetual Strife

So Termergant awhile her Thunder tries And when she can no longer scold she cries.

Lately died aged 88, Mrs Beatson in St John's Madder Market Norwhich a Native of Wales; she was commonly called the free Mason from concealing herself in the ceiling of the lodge Room where she learn't the secret which they say died with her.

Set one of our Dye pans over Yesterday; he was two days over it pd him 10/6 for his work; trying it today finds it to answer the best

we have had any before<sup>1</sup>: it was a clothier that set it.

8 Very well for Work in the Mill—All pans in use today—Drying Wool in the Dryhouse. Roads bad—People throng in their harvest, but they have not begun to lead any yet that I know off. Corn mildewed and sprouting.

9 Fine harvest Morning—Drying Wool out of doors—

II We have 34 Cloths of Wool to begin on in the Mill this Monday morning. Pontefract Races begin to-day.

12 Fine Morning—At Leeds today.

- 13 Fine Morning went to Berkin near Ferry bridge to Pontefract Races in the afternoon.
  - 14 At Pontefract Races, a very wet day, came home at Night.

15 At Leeds for Drawback.

16 Setting another of our dye pans over. Plenty of Work.

17 Sunday pretty fine day, many people leading Corn. Josh Mallinson badly, our farmer Man at home.

18 Turns out a very rainy day. We have 40 Cloths of Wool to begin on this morning. Pray God continue it. Corn in a shocking condition—sadly sprouted—we have not got a sheaf yet.

19 The stormiest Night for Wind and Rain I have seen this long time; it has scarce left a haddock² standing in the fields; there

- <sup>1</sup> Except for a vague mark between 'before' and 'it' there is no stop in the chain of sentences. What he attempted to say was 'it answers better than any we have had before,' or 'it answers the best of any we have had.'
- <sup>2</sup> Haddock, or Hattock, a shock of corn consisting of a number of sheaves set to dry. A Stook.

cannot be worse weather. At Leeds to-day. Putting a new Brass on the Laying shaft next the catch Box in Scribbling Mill the first we have put in. Fine English Wool has got so dear this year that we say so much Pr lb; we dare not say so much Pr Stone (h)as we used to do it looks so much.

20 Very rainy day. I never saw corn in a worse situation.<sup>1</sup>

21 Pretty fair harvest day but Wild—Mowing oats on Swinnow—Got a Waggon Load of Wheat in to Night the first corn of any kind we have got this year.

22 Shearing Wheat on the Swinnow Close. Cape Mill standing

for want of work.

23 Rainy Morning—Roads bad—40 Cloths of Wool in the Mill

this Saturday Night.

- 25 Put a young Pike and another Tench in our dam Yesterday. Leading Oats of [f] townend Close. Showers of Rain this afternoon—Mowing beans in the great field next to the Mill. Lighting in the Mill to Night.
- 26 At Leeds to-day—Jnº sets of[f] for Harrogate—Markets pretty good. Finished corn leading.
- 27 A very wet & Wild Morning—A very deal of corn out. Roads very bad—Plenty of Work in the Mill.
- Oct. 1 Mr Hodghson preach'd at Bramley Chapel. Jno came from Harrogate.

3 At Leeds to-day.

4 Seeking in money finds it very scarce—Clothiers say they

never saw less cloth in the Cloth hall since they could tell.

5 Wibsey Fair. Plenty of Work in the Mill. Drying Wool in dryhouse with a heat of 168 degrees. Running in the Mill while 10 o'clock.

6 Plenty of Work in the Mill—making Seven days in the Week—I see no mills in this Neighbourhood that are lighting but us. Gave 21/- for a Receipt to Cement Straps together without Wangs.<sup>2</sup>

7 It is said the following receipt will drive away rats from any

place where they are—

Take Laudanum or Rhodium 6 pennyworth Tincture of Spanish flies 6 pennyworth Mix these with flour and sugar & lay it where they haunt.

Settled in full with all our Men in the Mill for Wages—we make

it a rule to rec[k]on and balance every fortnight.

- 8 Father went to Monkton near Ripon—Roads very good.
- 9 Drying Wool out of doors. Settled in full with David Hainorth both for Corn and Coal leading.

10 I saw Red Beck Mill had begun to light last night.

- 11 Agreed to take Laz<sup>8</sup> Naylor's Scribbling in Coals at 10½ per Load—I understand the Clothiers have it in contemplation to rise
  - <sup>1</sup> Situation, *i.e.* condition.

<sup>&</sup>lt;sup>2</sup> Whangs: the lacings or thin long strips of raw leather, used to lash together the ends of machine straps, or similarly in a flail.

one side of the Mix'd Cloth hall<sup>1</sup> for the purpose of showing Pellin Cloths in; they are afraid that the Tom Paine hall<sup>2</sup> is rather injurious to them. We have plenty of work in our Mill.

A Calculation what a Mill that has 3 Falling Stocks and one Driver with 3 Billies and 3 Scribb[lers] what it will earn and leave in a Week—

Suppose [it] in a fair trade to Mill— 30 Pieces Pr Week comes to Billies and Scribblers Drawbacks on Soap 14 Earn Pr Week £27 14 Wages & other outgoes reconing Nothing for Repairs d. S. Overlooker who must be Willier besides IO Scribblers wages 19 Fillers and Pieceners 5 Slubbers I 4 Head Miller if benefit of Soap & to fire the Engine Wash 6 Carrier 6 12 Horse OI Coals 12 Load Pr Day 12 Dryer 6 6  $f_{12}$ 4 27 14 12 6 Balance in favour of the Mill which will 6 15 9 be pretty near Mistake in the Coals 3 6 Gains 9 12

<sup>12</sup>  $M^{rs}$  Waddington leading Beans out of the Close next our Dam.

<sup>&</sup>lt;sup>1</sup> 'In 1810 an additional story was erected on the North side of the Coloured Cloth Hall for the sale of ladies' Cloth in an undyed state '—Baines' Directory, 1822. Further reference is made to it under Dec. 22nd.

<sup>&</sup>lt;sup>2</sup> Both the White and Coloured Cloth Halls were restricted to Clothiers who had served their full apprenticeship. For such as had not this qualification an irregular market sprang up and after it became established in the Music Hall in Albion Street soon after 1790 it became known as the Tom Paine Hall 'in honour of that apostle of individual liberty.'

On looking our Books belonging to our Mill over I find there is £164 in what we call doubtful debts which has been contracted from our first beginning up to this time; but I do suppose that they are worth 10<sup>s</sup>/ in the Pound which is better than was likely considering the bad times we had to begin in as well as the beginning a new Mill which always has above its share of bad Customers.

13 Plenty of Work in the Mill—There is ice this morning the first I have seen this year. Got part Wool dry out of doors to-day—

14 Uncommon fine Weather with strong frosts in the Night-

Leading Willie Dust on to Swinnow Close—

16 Posting Mill books—Running in the Mill till 9 o'clock at night—Wrote a letter to W<sup>m</sup> Threapleton Houghside in order to make him pay his account off; the following is a Copy; that place is one of the worst to get payments from.

Bellisle Mill 1809

Wm Threapleton

You seem to take very little Notice of what has been said to you respecting making your Scribb<sup>g</sup> Acco<sup>t</sup> less; we however intend shewing you that we have not fogot that your Acco<sup>t</sup> is unreasonably old & we therefore say for the last time that if you do not settle it either all or in part by Tuesday next we shall order a Writ for you without further Notice; we have s<sup>d</sup> in a similar way before but you will find this to be the truth but take your own methods for we shall not come to you any more neither shall we send

## from Rogerson & Lord—

17 At Leeds to-day. I understand that Jno Stead of Bramley has taken the far house from here in the Broad Lane which his Brother-in-Law Richd Farrar used to live in; they have advanced the Rent. Our Mill makes those houses lett uncommon well; they were once tho't [thought] very little of but it is the reverse at this time.

18 Got Six new Baskets into Mill. A young man from our house is from Sheffield.

I had rather a curious time with a Clothier of the Name of Josh Walker of Pudsey, a person who had owed us a balance of a Debt for near two years: he comes to me to  $M^r$  Cass's Boar Lane Leeds and said he wished to balance his  $acco^t$  to which I gave a suitable reply; he said it was  $f_I$  7—which I said was wrong my books was  $f_I$  17  $f_I$  which (h)as he had several notes before  $f_I$  testify; with that he  $f_I$  which (h)as he had several notes before  $f_I$  only (h)as he  $f_I$  for that I told him I did not care a mistake was no payment  $f_I$  one word might serve for all; I  $f_I$  take no less  $f_I$  if he did not immediately settle it as I said I should immediately enter him into an Attorney's hands: he replied that it did not matter I durst not: immediately I turned  $f_I$  enter'd him came back  $f_I$  found him standing in the same place talking with my brother to whom he wanted to pay the whole sum but he  $f_I$  not take it  $f_I$  he went  $f_I$  put the Attorney when he could not cheat me out of it.

19 An exceeding fine seed time. The following receipt seems to answer our purpose to kill rats the best—for tho' the Mill is quite new we are much troubled with them—Take a quantity of fish. Cut it in small pieces and lay it where they come for two or three Nights without anything else; then on the third Night—when you think you have collected them together take 6d of White Mercury & put that into such a quantity of fish as you think that they may all have a taste & I dare say you may destroy them all for Rats love fish and the taste covers the taste of the Mercury so that they take it greedily. Plenty of work in the Mill—

20 Rather dull but I never saw finer Wheather at the time of the Year—Company Mill Stanny has not begun to light with

Billies.

21 Sowing Wheat on Swinnow Close. Shut the Books up to Night for Scribb<sup>g</sup> Mill pay day. News to day that there is peace between France & Austria.

23 Posting my Mill Books up—We have earned in the Mill taking Scribb<sup>g</sup>, Stocks & Drawbacks £900 since our last pay [day]

which was 4 months ago.

24 It is Market day at Leeds but I was not there I was writing Notes out.

25 Very fine Morning—This Day his Majesty King George the 3<sup>d</sup> enters into the 50<sup>th</sup> year of his reign; most Mills are standing and services at most of the places of Worship—I believe there is

great to do at Leeds on the occasion.

Took the High flyer Coach for Leeds this afternoon spent a very pleasant after noon saw the Soldiers fire—at Night there was fire Works at the Hotel which afterwards was lighted up in the form of G. REX—It was one of the finest days I ever saw I never saw one Cloud the whole day.

27 Very throng both in Cloth Mill and likewise in Scribbling

Mill.

29 Jno goes to Thorp Arch—

30 This is the grandest & pleasantest weather for the time of the Year I ever remember seeing. Delivering Notes for Mill pay day.

31 Market for Cloth today rather slack—Jno came from Thorp Arch.

Nov<sup>r</sup> I Finished delivering Notes for Mill pay day. The two Overseers of the Poor for Bramley this year is Benj. Binks junior & Jon<sup>n</sup> Musgrave Low Moor. Jon<sup>n</sup> is a comical blade; to day is the first day he sh<sup>d</sup> pay the poor but he is determined not to stand if possible; his sons have been before the Mayor of Leeds in order to prove him insane with an intention of saving his Money & keeping him out of the office or rather with an intention of having it said that they have Mastered the town—I rather suppose that the poor people will have to remain unpaid today—The poor people have not got p<sup>d</sup> to day, there has not been one penny p<sup>d</sup> to them it is such a circumstance (h)as has not occured in Bramley before.

Thos. Rogerson Churchwarden

Jas. Dickenson Constable.

2 Laying a Causway over again at the top of Bramley to this Turnpike Road—Chas. Lord & Jerh Gaunt Overseers for the High ways. Very throng in the Mill.

Fine Weather—They tell me that several mills are slack of

work tho' we are so throng.

Ge<sup>o</sup> Hainorth laying the drain at the end of the Overlooker's house—There has been no Money p<sup>d</sup> to any of the poor this Month yet. I understand there is an order from the Justices of Leeds for Jon<sup>n</sup> Musgrave to appear before them to-day—I suppose the plea why he shall not stand, his sons inform'd the Justices that he was insane. What a Shame—I believe there is the meanest, lowest, dirtiest, dishonorableist selfishist set of what is called above the Common level of Men in Bramley of any town in the Kingdom; act any kind of meanness if it only saves their pockets—Roads very good.

4 Waddington's sowing great Close with Wheat—I suppose Walter Farrar is standing as Overseer at so much Pr Week till they can bring Jon<sup>n</sup> Musgrave too; I suppose they are going to

lay an Indictment against him.

5 Came to Mill this Morn recon'd with Sunderland had part talk respecting our Willier leaving. Slubbers working very hard last week—have begun to recon with them every week the first

time last Night.

- 6 We are very hard run'd for Money—My Father and Mr Oddy goes to Wakefield to give their Votes for Mr Busfield having the Register office at Wakefield against Mr Hawksworth; Mr Busfield finds them a conveyance at his own expense. Throng in the Mill. One of our Carriers brought word that James Elsworth, Pudsey, had a Cloth Barry¹ with another colour; this is the second Cloth we have had damaged within this fortnight and all with negligence—Put a Notice in the Mill saying that at whose Billie it was found had damaged any Cloth by what is called Barring it he, the slubber, should bear his share of the Loss in proportion as he rec⁴ his wages; that is ¼ of what it earns, as such he bears ¼ of the Loss.
- 7 At Leeds to day—Cloth Market rather flattish. About II o'clock in the forenoon met with Jno Duckett of Settle, went and got a glass of Ale together—he is a very pleasant young man; he came home with us at Night & took a Bed with us. I understand that Hawksworth headed Busfield the first Days Poll 45; today it is reported that Busfield is before him; it is thronger at Wakefield than it was at the Election time at York for the County members.<sup>2</sup>
- <sup>1</sup> A term usually applied to any defect or mark running across a piece in bars; if running lengthwise it would be called 'stripey.' But here 'barry' has reference to similar defects in the slubbings, and the 'cloth' is a cloth of wool returned to the owner in the form of slubbings.
- <sup>2</sup> As is evident from Rogerson's remarks, the prolonged contest for the office of Register of Deeds for the West Riding, vacant by the death of Peregrine Wentworth, ranked in importance with a County election. The Ballot Book, or Poll Book, containing also the history of the office and of the contest, was published in Leeds in 1809.

8 Leeds fair. Brother Jn<sup>o</sup> & Duckett there—our team leading stones yesterday for a wall at the Mill end and another besides the Necessary. Gave K. Holdsworth 6<sup>d</sup> P<sup>r</sup> Load for Coals leading from Adwalton—We have had one Jn<sup>o</sup> Hunter from Pudsey to endeavour to settle our acco<sup>t</sup> between Js<sup>h</sup> Boocock & us. We have a Writ out against Js<sup>h</sup> which now wants renewing owing to the villany of a pack of Baliffs; they have not took him tho' the Writ has been out these many weeks—

Chas Lord & me had some disagreement respecting some stone

our team led for a Wall.

9 Our pay day for Mill at our house today; we got about \frac{1}{3}

of what was owing.

To Slubbers working to-day, they behave well. News is brot into Bramley that Busfeild is 121 Votes before Hawksworth. Brother Jno and Chas Lord at Low Moor today Balancing for the Engine & other Iron Work which they settled for us in full except for the Dryhouse—I am glad we have got done with them almost, for they are very sharp on people.

II Hawksworth gave up in favour of Mr Busfield. I under-

stand Busfield was nearly 200 Votes before him.

14 Rainy & rather Windy—at Leeds to-day.

This day set off to M<sup>r</sup> Marshalls to fetch my foal home—got to Grimthorp about 5 o'clock at Night found all well—Went with the foal to get shod the next day at Pocklington; it was pretty still to shoe.

19 Set off with foal from Mr Marshalls—Ground covered with snow till I got to Wilberfoss & there was not any more all the way—

slept at the Slip Inn near Tadcaster.

Fine & frosty—set out from Slip Inn 8 o'clock in the Morning, got to Leeds about 12 o'clock & went & bot two Pellins to send to Grimthorp one for Mrs Marshall and one for Miss Greenaway—arrived at home at 6 o'clock at night & found my Mother unwell.

21 Throng in the Mill.

- 23 Father at Bradford—Roads very bad—One of the Carriers at Leeds.
- 24 Chas. Lord & us trying to settle our acco<sup>ts</sup>—I rather suppose we shall not be very agreeable.

26 Sunday, writing our accot out from first to last belonging

the Mill. Jno doing the same at home.

- 27 Writing my Mill accots out; they please me they are so exact in my opinion & without Chas. Lord is determined to disagree I think he must be satisfied. There is a light to the NE. to Night about 8 o'clock which is reported to be Chas. Wood Mill that is on fire.
- 28 Throng in the Mill—At Leeds to-day with cart only an indifferent Market for Cloth—At the Play to night—Hannah Nawthrop Daughter of Josh Nawthrope died today in a fever in her brain about 19 years of age, there never was a likelier person for life—Bot some Black dressed Cloth of a Cashman at Leeds at 17/Pr Yd; he is to be paid in Cloth partly again.

29 Joseph Dickinson has taken it upon himself to serve [as] the Overseer of the poor for Bramley this half Year—

The following are two lines suitable for an Epitaph & which I

took out of a Book at Mr Marshalls—

To Mortals common fate thy mind resign My lot to Day, tomorrow may be thine.

Writing several very sharp dunning Letters to Pudsey; I never saw such devils to bleed—there are very few Mills lighting at the Night this way; on the contrary there are several standing for Work.

30 Dock'd our foal-Wild afternoon. Roads very dirty-Sent a letter to Mr Marshall Grimthorpe to inform him that line cake<sup>1</sup> is worth 15 Guineas Pr Ton in Leeds. I understand the light we saw was Whitely Mills that was burnt down. Scribbling a Pack of Lambs Wool without oil for Mr Braithwaite Leeds.

Decr I One of our Carriers gone off without leave; I intend him to leave for it, he is one of those that thinks [he] has a right

to do as he pleases; we shall let him see to the contrary.

2 Went to Leeds—heard of the news that they have took all the Ships from the French which were carrying provisions for the french in spain—by Lord Collingwood: it was on the very day

our King entered the Fiftieth year of his Reign.

3 Mr Hodghson preach'd a Sermon from Dr Buchan on the Success of the Missionaries in Hindustan; also showed that they have writing there that informs them of the coming of the wise men of the east with offerings at the birth of our Saviour; we were obliged to have candles lighted before he had done.

4 Chas. Lord and us settled for the Mill Building more peaceably than I expected. It costs (the Close, Dam, Houses and everything) £5700 and rather better. Hired a new Carrier to-day.

5 Fine sharp Morning—at Leeds today—Money very scarce.

Summons'd two of our Customers for Scribblg—

- One of our Carriers called Jnº Barnes removing to laneside house Bramley. I have agreed to pay him his rent as long as he remains our Servant on Condition that he stop so much of his Wage every Saturday Night as the rent comes to in a Week to which he has agreed—he is a very good servant or I shd not have done so— Plenty of Work in the Mill. Our Foreman going with Carrier Cart till a new man comes.
- Got a new Carrier this morning, his name is Michael Blakir. At Leeds to-day with Cart for Wool.
  - 8 Our Overlooker goes to see a Brother of his that is badly.
- I was at Leeds to day. Settled with Slubbers &c—Bradford fair.
- II We have less work this Monday morning than we have had this 6 months past, but we are still working away—Received a letter from Miss Greenaway saying they had not got the Pellins which I sent to Grimthorp the 20th Novr last—Went down to

<sup>&</sup>lt;sup>1</sup> Linseed-cake.

Leeds this afternoon to see about them; the Bookkeeper says they were sent to York immediately.

12 I was at Leeds to-day again, also our new Carrier there with Cart. Plenty of work came in last Night. Brot plenty of Wool

in from Leeds and left part at Leeds.

13 Hills covered with snow. Yesterday some Iron came from the Low Moor for a new Machine—Begun to break our young horse by Anty Knowles this day.

14 Went to Leeds for Drawback. Came back at Night without

getting it, the Collector not being there.

15 Recd a letter from Grimthorp saying they had recd the Pellins—Got the Drawback to-day—did not arrive home till 12 o'clock at night—bad plan.

Still Frosty Morning—Shot a few Fieldfares to-day.

18 Overlooker gone to bury a Brother of his—mending the low Clack<sup>1</sup> of cold Water Pump--

19 Wild wet morn—Roads very bad. At Leeds today with Cart—Very throng in the Mill. Begun to-day again to break our young horse; he had him at Leeds.

22 I never saw wetter weather—Settled with Benj<sup>n</sup> Roberts for his coals, in leading with son2 comes to £25, pd him in a Bill

I understand there was a meeting held by the Clothiers at W<sup>m</sup> Spencer's, Sign of the Pack horse, Bramley in order to choose new trustees for the Mixed Cloth Hall instead of Geo. Eddison the old one—I suppose S. Musgrave, Bramley, is chose in his stead; the reason why they don't chuse the old ones again is this: the Trustees have it in contemplation & have actually bought Timber, which now lies in the Cloth hall yard, in order to raise one side for to shew White cloth and Pellins & other fancy articles, which rising is very much against the consent of many of the principle Clothiers; they think if the Merchants want such articles they will find means to buy them without that cost.

My opinion of Leeds Cloth hall is this: that in some future day it will be of very little consequence as I think Cloth will get to be manufactured at Mills & carried to Merchants houses & indeed this

deserves to be the case for they are an arbitry set of men.

Throng in the Mill—running till 10 o'clock at Night this Week. The Cloth Mill is rather slack of Work to day. The Clothiers have so much wet Cloth on hand [for] there has been no Drought this

23 I never saw opener weather for the time of the year—no snow to be seen and quite warm to day. Old Trustees have pull'd part of the Cloth Hall down.

24 Dull & rather Frosty—Tentered a piece to-day.

25 Cleaning and mending our boiler—no snow on the ground not like Christmas day-rain in the Evening. At Leeds to day with Cart—Left money in Sunderland's

<sup>1</sup> Clack, a valve of a pump. <sup>2</sup> i.e., with leading by his son.

hands to pay Rob<sup>t</sup> Holdworth in full for Coal leading—A very heavy load of Wool from Leeds to day. Broke Cart Wheel with it.

27 Plenty of Work in the Mill—

We bought a Coat of Scarlet Cloth to send off at 40/ per Yd an enormous price but very fine—Yesterday sent by the Defiance Coach from the Hotel Leeds a parcel for Mr Marshall Grimthorp containing the following articles—

7 yds. Pln Dy Cloth at 8/6 per Yd., 2½ Yds. of Broad Olive Cloth at 25/- per Yd., a Pinchbeck¹ Watch & a Gold Broach worth 31/6

for which I pd 8d for the Carriage to York.

28 One of our Slubbers been ill above a week. Overlooker slubbing to day—Most dark mixtures in the Mill of any Colour.

30 Another of our Slubbers poorly this Morning. 31 Mr Hodghson preach'd at Bramley Chapel.

Book 3.

1811.

Take care of these Books.

Jan. I Dull Snowy Morning—Expected a very deal of Money at Leeds being the first Tuesday as well as the first day of the Month, never was worse disappointed. Cart at Leeds had a pretty good load of Wool home but we care very little for being throng without there was more plenty of Money—Scribb<sup>g</sup> Mill Slack of Work, not lighting to night. Saw M<sup>r</sup> Jn<sup>o</sup> Duckett at Leeds to-day. Sent a hare and a Brace of Partridges to M<sup>r</sup> Schofield London. Got home a little before 9 o'clock at night—

2 Received letter from Broth Jno from London. Father goes down to Leeds on account of that letter—All dye pans in use to day. We are going now on the 5<sup>th</sup> Year we have run'd our Mill & thank God we have had no misfortune worth mentioning. Chas. Lord in Pudsey seeking in Money. No better—We have never got a Single

Bill this Month.

- 3 Not lighting in the Mill to Night. Gass lights are beginning to be pretty common; there is a Publick House lit with it in Leeds, Publicans name is Fitzgerald; we talk of our place being lighted the next Winter with it—Looked our Coal Notes over this afternoon; we have got £119 from Mrs Syks Pitt, Driglington, of Coals this Year.
- 4 Thos Cooper has got Warrants for Benj. Robinson W<sup>m</sup> Robinson, Jno Stead Geo. Horsman & W<sup>m</sup> Bentley for striking him & using him very ill as they came from Leeds on Tuesday last—Very snowy Day—Rec<sup>d</sup> Newton's Farnley Coal Note—they keep the worst acco<sup>ts</sup> of any we follow. I understand S. Walton's Mill is Standing for want of Work to day. For those first four Years of this Mill of ours running I have seen us begin almost every morning somtimes at 5 & 6 o'clock in the Morning & also seen the fires put out at Night when we gave over, which was at 8, 9 & 10 & 11 o'clock at-night: & we have generally run later in winter than

<sup>&</sup>lt;sup>1</sup> An alloy in imitation of gold, named from its inventor, a watchmaker.

summer, in Winter frequently all night—I have had to go home for Breakfast Dinner & Drinking & I generally got back before they had got theirs; time we allotted Slubbers for Dinner was I hour.

5 Very snowy with wind it turns out a very winterly Day—Mill Slack of Work—This cold weather makes us burn nearly as

many more coals with the Engine as we do in Summer.

6 Pretty fine day—No service at our Chapel this forenoon.

7 The prevailing talk in Politicks is the King's indisposition & respecting the Prince of Wales being regent; the Ministers want him to take it but to limit him, which he won't do.

Settled with Tordoff and Johnson [of] Dudley hills, in full by

Johnson lad.

8 Cart at Leeds to-day—Open the end of the Fold Hall for

White Cloth for the first time to-day.

9 At M<sup>r</sup> Oddy's to Night at a Šale of 4 houses next our house belonging to Dav<sup>d</sup> Hague [of] Horsforth; there was £190 bid at the whole; Hague's reserve bid was £250, they were not sold.

10 Fine & frosty—Roads extremely good.

II Wrote a letter yesterday to Rooley Staiths¹ saying we had measured Johnson's Cart & find they are delivering us 8 L<sup>d</sup> for 9; also wrote to say we should have no objections to take 1, 2, or 3000 L<sup>d</sup> this Year if we could have full measure and at 3½ Pr L<sup>d</sup>— Work scarce, not lighting this Week—we have not work enough for Daylight.

Wet & Wild, roads dirty, Snow nearly all gone. About 8 o'clock this Saturday Night brother Jno arrived safe from London.

- 14 Pretty fair Stock of Coals by us, as many I sh<sup>d</sup> suppose as will last us to the Middle of March next—Mills in general are very slack of Work. The coals we are getting from Rooley Staiths stand us when laid down here to 10<sup>d</sup> P<sup>r</sup> L<sup>d</sup>.
- 15 Cart at Leeds to day—Reported that the Prince of Wales has accepted the title of Prince Regent under certain restrictions—'tis said he has been a very wild young Man, but it is said he is a great orator: how far this is true I cannot tell for we seem [only] of late [to] have even heard of him; he seems to have meddled very little with Politics.
- 16 Running with Stocks all Night in order to get all Mill'd ready to put new Stock down.
- 17 Slack of Work at the Scribb<sup>g</sup> Mill. Begun <sup>1</sup>/<sub>4</sub> after 10 to get shafts in Cloth Mill up in order to put tappet Wheel on which we
- ¹ The coal-pit would be Rooley pit on the south side of Rooley lane opposite Rooley Hall, a short distance from Dudley Hill or Wibsey Bank Foot, and in Bowling township. It is clear from his complaint that the cart was supposed to hold nine 'loads,' the unit of measure throughout the diary. The inference is that a 'load' was either a pack-horse load, the amount carried in the two panniers or baskets, a hundred-weight or perhaps a little less in each, either side the horse, or a single sack—a 'mule-load.' It has already been stated (10 Jan., 1809) that a 'load' contained 5 strikes. The contract price then was 10<sup>d</sup> per load, which is again (14 Jan., 1811) stated to be the cost of the Rooley coal by the time it was laid down. So that the figure 3½<sup>d</sup> per load was the price at the pit-head. At the end of this year it was raised to 4½<sup>d</sup> per load.

did ready for wedging and shafts again in their place by  $\frac{1}{2}$  past 4 o'clock in the afternoon. One of our Carts at Leeds for 3 Sheets of Wool of Jas. Pearsons Farsley—The other Carrier goes for a Stone

to Green Quarry for back of Stock.

- 18 Wild winterly Morning—Chas. & David Lord Working at the Stocks—Got tappit Wheel wedg'd on by I'oclock this afternoon—Pd to Rooley Staiths in full by their Farmer Man, £9 7s. 7d.—Got new Stock over this afternoon. On examination of the Sills for the new Stock we find they have had a good deal of Sap [wood] on them and tho' they have only laid 4 Years we find that the Sap [wood] is completely Rotten: there shd be nothing about a Cloth Mill in the Wood way but what is heart of Oak, it is of so rotting a nature.
- 19 Chas. Lord and David working at the Stocks—Wilkinsons got 8 Load of Coals to-day. Made a pair of Indentures for Benj<sup>n</sup> Lord apprentice to Jos<sup>h</sup> Dickinson for 7 Years Dated 1808 Apl 30<sup>th</sup>.

20 At Shipley with Brother Jno to see Mr Duckett; spent a very

pleasant day—got home a little before 8 at Night.

David Lord working at the Stock—Pretty well for Work. Bot a hide yesterday for wangs for which I am to give 16/6. Tanned hides unnecessary they ask 20<sup>s</sup> Pr lb. for [them]—One of our Slubbers named Josh Barker lies very ill, he has been badly near a fortnight—Finished the Stock by 10 o'clock to Night: it is called Job after a lad of our Millers; it was quite an accident that we got this Stock the tree was bot at Apperly for Bro. Jno [for] a pair of Tenters but owing to me agreeing with Dufton Senr [of] Pudsey they run up¹ of the wood which was better for they never wd have made their own of it; so Chas. Lord went & saw it would answer for a Stock and to make Coopers case look better he took it for the above purpose.

New Stock going this Morning starts fair—Cart at Leeds to day. Our Neighbour Jn<sup>o</sup> Benton came to ask me to Scribble for him; said I would but it should be paid for before it went from us—We have been there before, we had to take £42 in Cloth of him by which we had to lose considerably. Only a poor Market for Cloth

to-day.

- Very throng in the Cloth Mill. Trade flat, Wool lowering fast, there will be a great loss in fine Wool, Clothiers obliged to be content with small profit—Lighting with Billies all this week. We have only 5 going one of the Slubbers poorly—David Lord putting some new head stocks on to Machines.
- 25 The Turnpike people talk of making Carts &c. pay at the place above our house where there is stoops for a chain—those who live in the Township as well as those who reside out of the town; it was to have been put in force this Morning.

<sup>1 &#</sup>x27;They ran up of the wood '—a dialect expression: 'to run up of a bargain,' meaning to run off a bargain or break it.

26 Had a person from Bowling Iron Works to ask respecting the Fall Stone, whether I thot it wd stand fire & also to know the price Pr Cube Foot to let him. I could not tell but wd send him a sample of stone to Dudley hill along with the lowest price.

27 Fine day—At Chapel in the forenoon, took a walk round Bramley fall in the afternoon along with Richd Pearson Jas. Hudson

& Brother Jno; got our tea at Hudsons.

28 One drop of Laudanum is instant cure for the sting of a wasp—Lighting in the Mill to Night. All pans in use to day. Very

frosty to Night.

29 Cart at Leeds to day. Dined to day with the two M<sup>r</sup> Bischoffs<sup>2</sup>—Very pleasant men. Got some Wool from London of Jno's buying. Father bought 2 Load of Beans for 18/- P<sup>r</sup> L<sup>d</sup> for

Mill—Cheap we think as hay for the horses.

- 3I Trade flatt owing as is said to the Non-intercourse Act going to be in force between America & us; the knowing ones say they think the Americans want a good drubbing. If the Prince of Wales comes in as Regent to day as is said he will have a bitter day of it for frost & snow I mean. All our Dye pans in use to day. Sale of Mr Oddie's Slates & flaggs.

  Feb. 2 Yesterday Alderman Cookson³ of Leeds Died; he
- Feb. 2 Yesterday Alderman Cookson<sup>3</sup> of Leeds Died; he was a very good person to Bramley when any of the Inhabitants wanted a good turn.
  - 3 Looking at the Valve belonging the Governor of the Engine

to see if it was right, found it could not be mended.

- 4 There are a very many people going to day to Bradford to see the Bishop Blase<sup>4</sup> celebrated; hundreds go by here, I may say
- ¹ Bramley Fall on the southern bank of the Aire and Hawkesworth Wood and Horsforth on the north, have long yielded valuable stone from the Rough Rock of the Millstone Grits, that was then, and later, largely used for engineering works, such as docks, locks, and bridges. James Oddie, the lessee of the Bramley Fall quarries, had died in 1810, and the explanation of Rogerson's interest in them and his numerous references to Oddie's estate is that his brother John was on the point of succeeding to the business.
- <sup>2</sup> The Bischoffs were prominent cloth merchants in Leeds at this time. Two firms, Bernard Bischoff & Sons, & George & Thomas Bischoff, signed the manifesto of 1791.
- <sup>3</sup> William Cookson, b. 1749, d. 1811, was another eminent cloth merchant who was twice Mayor of Leeds. He gave evidence on the Leeds industry at the 1806 Enquiry 'on the State of the Woollen Manufacture of England.' He was associated with Bramley in that he owned land there.
- <sup>4</sup> Bishop Blaize was the patron saint of the wool-combers, and the celebration of his festival on February 3<sup>rd</sup> was observed at Bradford about this period with much outdoor ceremony.

The Leeds Mercury, February 9th, described this year's procession as

follows:

## THE GOLDEN FLEECE.

This festival, which has for ages been celebrated in the West Riding of Yorkshire every seven years, was held at Bradford last Monday, and attracted a vast concourse of spectators. About ten o'clock in the morning the procession was completely formed and paraded from the Old Market Place through the principal streets of the town and the adjoining villages.

This was followed by the order of the procession:—

thousands. Mill standing, all our men gone to Bradford. I suppose the Prince comes in as Regent to day and not on a day last week as I s<sup>d</sup>. II o'clock wet & Cold—Jno endeavouring to buy some Bear Skins at 3/2 Pr Yd.

5 Cart at Leeds to day—Money very scarce.

6 S. Walton has been to ask us to Willie a few Cloths of Wool for them they have broke their Willie, s<sup>d</sup> they might Willie a few. Jno and I went to seek some Bear Skins in Pudsey, Stanningley and

Farsley, also money if we could get any.

7 Completely gave over lighting on the 3<sup>rd</sup> of this Month for this Season—Jn<sup>o</sup> went Yesterday to look at a Pump belonging to W<sup>m</sup> Crampton, all of Iron, in their well, as we are in want of one, as some say they will spoil the water but Cramptons say they answer well; if so they come in a very deal cheaper—they are only just beginning to come in use & [as] the plumbers are afraid of [losing] their trade they give them a bad word, but time tries all. Trade very likely to be very ill. Jn<sup>o</sup> gone to Bradford on M<sup>r</sup> Oddie's account. Our Searcher<sup>1</sup> has been saying that Jn<sup>o</sup> Varley, Stanningley had a pay Day for Mill & had only two persons at it.

8 Wet & wild—at 9 o'clock this Morning it is excessive strong is the wind—Jno ordered an Iron pump of Mawson & Co., Bradfd,

yesterday at 13/ Pr Yd, us to find all the Iron work at top.

9 Got several pieces dry to day.

To Got a dog from Sir Henry Ibbetson's, Denton, Game keeper—went to Mr Spinks Kirkstall Bridge to Night along with Jnº &

Mr Ino Waddington.<sup>2</sup>

- II Jno goes to York, Malton and Hull on Mr Oddie's account. Mr Jno Waddington accompanies him as far as York and then returns. Going this Morning as far as Farsley to Buy bear Skins—We are not very throng in the Mill—Father took possession of the Acre close that was Josh Demain's opposite Mr Waddington's great close.
- 12 Cart at Leeds to day—I see they are Numbering the Doors in Leeds.
- 14 Lost my pointer Dog this afternoon sent our firer to seek him; [he] found the collar which some workmen in the Fall had took off, but c<sup>d</sup> not find him.

THE MASTERS ON HORSEBACK, with each a white sliver; The Masters' Sons.. Music;

THE KING & QUEEN; JASON; THE GOLDEN FLEECE; BISHOP & CHAPLAIN," with "THE WOOL COMBERS two & two" in the rear. Elsewhere in the same issue is a topical paragraph that reveals another aspect of the festival.

"A correspondent facetiously observes that the *blaze* was not out in Bradford yesterday, though the *beer*- engines had been playing upon it ever

since Monday."

- <sup>1</sup> Cloth Searchers were persons appointed by law to visit the fulling mills to inspect and measure the cloths and stamp them accordingly.
- <sup>2</sup> Towards the end of the year these three, J. Spink, John Rogerson, and John Waddington, entered into partnership to work Bramley Fall Quarries in succession to James Oddie.

15 Plenty of Work came in to-day

17 No service at our Chapel in the afternoon went down to Leeds & wrote a letter to Denton to say I had lost my Dog.

18 Begun this morning of Posting the Mill Books up. Recd a

letter from Ino Dated Hull.

19 Cart at Leeds to-day. Pretty well for Work—We have only

5 Billies going—rather brisker Cloth Market.

20 Set off this Morning for Eccleshill to look for my Dog—Got there by 8 o'clock in the Morning. Did not find him, went then to Apperley Bridge, then on by Thompson's low Mill, on by Calverley Mill, then to our Mill & after that home, very ill tired & hungry. Jno got home to Night.

21 Sunderland going with carrying cart, Carrier being poorly.

23 We have earn'd in Scribb<sup>g</sup> Mill & Cloth Mill with Drawback since the last 25<sup>th</sup> Oct. up to 23<sup>rd</sup> of Feb. £950. Monday last got new cards for carding fancy facing top of Garret stairs, Chas. Lord nail'd them on—Got all Notes ready for delivering out—We have on hand at the present as many Coals, if we had none lead, as would serve [for] Burning two months. I have wrote notes out for the following towns—For Bramley 64 Notes

Pudsey 41 Bagley & Farsley 18 Stanningley 15

138

Found my Dog to-night, he had got back to Denton.

24 A Collection in the Chapel for the Auxiliary Bible Society.

25 Begun to deliver part Notes out to day altho' I have not the whole of them ready.

Put a Notice upon the Mill door to say we should have 4/ out of Bramley & 3/ Pr Piece out of Pudsey for all pieces Mill'd above the quantity we scribbl'd<sup>1</sup>

26 We are throng in both Mills going to have the Six Billies

going for a few days. Cart at Leeds to day.

27 Pd Saddler Ward, Leeds, in full £8 9s. Extreme wet & extreme wild this afternoon. Delivering part Notes out this afternoon; we are carrying the Ware Notes out with them for the first time we have done so.<sup>2</sup>

28 Went to Ed. Wright and Sons with a Note got home by 10 o'clock.

March I Very wet and wild—Roads very bad. As I came from

- ¹ The purpose in view was to secure all the business of their customers. Unless the clothiers brought all their wool to be scribbled at the mill in the first place they would be charged extra for the final process, the milling of the pieces, in so far as these exceeded the wool handled at the mill. It was more or less usual to quote a preferential rate, a 'competitive' price to customers outside the township of the mill.
- <sup>2</sup> The Ware notes were for dyewares—the salter's business carried on by Rogerson and his father.

my dinner today met Mr Benson [of] Low Moor Foundry & gave him towards our account £17 10s.

2 Wild & Rainy—Planted a few cuttings of Poplars on top &

side of Mill Close above the Dam.

- Scribbling Mill likely to be slacker of Work this Week.
- Cart at Leeds to-day—Finest day we have had this year.
- 6 Dull & very Wild with rain—Our pay day to Day, I never saw a worse.

Dull cold rainy Morning—at Leeds to-day.

Set of this Morning for Grimthorp by the True Blue from the Golden Lion Leeds: Got to York by ½ past 12 stop'd and got Dinner but not where the Coach stop'd; on going there found it had set of & so had to walk the other part; arriv'd at Grimthorp at  $\frac{1}{2}$  past 5 o'clock & found all well.

Sunday a fine & pleasant Day.

Went down to Pocklington in the forenoon, got back to

dinner—uncommon fine Day.

12 Set off for home from G. the Coach overtook me in ten Minutes after I got on to the York Road within a little way of Wilberfoss; p<sup>d</sup> there for my fare to Leeds 5/6 in the Trafalgar. Got dinner at York and arriv'd at Leeds by ½ past 5 at Night.

13 Hedging & Ditching hill side Close.

14 Cloth Mill Throng Scribb<sup>g</sup> Mill slack of Work—Examining

- my acco<sup>t</sup> over to day by Chas. Lord.

  15 Ditching low end of Mill Close. Making a second agreement with Wm Byram1 which will take place on the 23rd of this Month: we are to give him 10/6 Pr Week him to have the Soap and Flocks; he finds all men to work the Stocks, he pays for his house rent and Coals; in short the sum total of his wages is Benefit of Soap, Flocks & 10/6 each Week. If we cannot agree we have almost said we should give him ½ a Year's Notice to quit, except on Bad behaviour or dishonesty. He has paid us for his ranges, pots, ovens in full £3 16s., which are now his own. Drying Wool out of Doors very Droughty weather.
- 16 Dull & very sharp Frosts in the Mornings—One of our Carriers and Chas. Lord goes for Bindings for Hedge: they threw the Cart over & broke it in Peices in the part of Hawksworth above Kirkstall Forge. We have as many Coals by us that if we do not get a Load we think they would last us 6 or 7 weeks-Roads dry & fine—On Saturday the 9th Jno Baker grinding the Cock belonging to the Injection also put a new ring on to Bonnet of Foot Valve.

17 Frosty Morns & fine still warm day.

<sup>1</sup> He was evidently the head miller, and lived in a house owned by Rogerson. The last clause is explained by the remarks of Joseph Lawson, describing conditions in Pudsey before 1830—"Many of the houses have no ovens, and the occupants have to bake on a 'bakstone' placed on the fire.... Few have iron castings for the fire-place, but large stones instead.... Such as have iron-castings, ovens, etc., have to put them in themselves as tenants, and risk getting a valuation when they leave the house." See *Progress in Pudsey* 2 Pudsey, p. 3.

18 Chas. Lord & Jno putting an Iron Pump down at home—Costs 13/  $P^r$  Yd Valves Rods & screws included, also to have a man a day to put it in.

19 Cart at Leeds to-day—Markets very ill—Mrs Oddie got

Married to Mr Nappy to-day.

20 Dull & like for Rain but growing [weather]. Fast Day—Mill running—Mill stands in the afternoon—getting manure on to Dam Banks in the afternoon—One of Carriers gone for Stakes.

21 All our Dye pans in use to day.

- 22 Fine & still—fine Growing weather—At Leeds to-day for Draw backs.
- Wery fine Spring weather—Grass grows fast in places—Mill not very throng —Went to Farnley this forenoon in order to settle with Newton a small Coal Note which we have disputed about this long time; call'd at Slipp Inn¹ on the Banks man he seems to know very little of either good or bad; went then to Newtons he was not at home was gone to Bramley; met him in the lane as I came home pd him £4 4s. on account but not any way thinking the Note is right—Pd Hawton, Pudsey, for Hedging £3 8s. 3d. in full for the Close intak of Waddington—Byrom Wage 10/6 Pr Week takes place for the first time to Night.

24 Mr Hodghson came to our house to Night. Very Ill in the

Head Ach had Dr Stables to me it begun on the 21st.

25 Very fine Day—M<sup>r</sup> Hodghson & a person from Pudsey Preach'd at Bramley Chapel; c<sup>d</sup> not get to go extreme ill to day.

26 Very ill to day, it lies all in my head; D<sup>r</sup> calls it an intermitting head Ache & is to be cur'd accordingly.

28 Very fine—rather recovering.

29 Very fine weather—got over to the Mill this forenoon.

Mar. 30 Weather fine beyond comparison, it is the finest Spring weather I ever saw I think. Our Coals begin to look with a very small face, there is not one leader. Got a Hide of leather for the Mill from Jno Duckett, Shipley, a few days since. Mill standing this afternoon, work scarcer. My Head Aches very ill to-day.

31 Wrote a few letters for Jno.

Ap. I The boiler got fettled out & off again this morning by

7 o'clock.

2 Carrier at Leeds to-day with cart—I was not at Leeds not being quite well yet. Burying a poor Taylor of the name of Jos<sup>n</sup> Shires at M<sup>r</sup> Trickets Chapel in the lane who had hung himself yesterday morning; he was found by his own daughter his family has been ill & that he could not extricate himself from some small debts he had contracted was supposed to be the cause. Work scarce in the Scribbling Mill, but in the Cloth Mill we are very throng. Wheat looks very well & grass very growing.

Roads very good. Our Dam runs a trifle over at the present.
There never was finer weather for the time of the Year, it

<sup>1</sup> This name identifies the 'Slip-in Pitts' mentioned on 21 Jan., 1808.

is like Summer—A new born Child found in Mr Pollard's dam this Morning. Pretty well for work in the Mill—Mr Allinson Game keeper to Sir H. Ibbetson, Denton, at our house to-day.

Dull & still, fine afternoon—went to Leeds in the forenoon.

Roads very Dusty, people begin to complain for want of Rain. 6 Had some hay Stolen from our Stack in the Mill Close.

Frosty with sleet—No service at our Chapel in the forenoon; at Leeds in the afternoon.

Painting a gate and a Door to-day—Accounts from Lord Wellington out of Portugal that the French are retreating.

9 Very sharp frost—At Leeds to day with Cart—Pretty good

Market for low Cloth.

10 Fine but sharp frosts in a Morning—at Leeds this afternoon— Jn<sup>o</sup> gone to Selby.

II I was painting a little to day.

12 Pretty well for Work very throng in the Cloth Mill. Ino got home from Selby this forenoon.

13 Sold 8 Pieces of Blues to Mr Leighs for 14/ Pr Yd.

14 Fine Growing Weather—Esther Sunday—No service at Bramley Chapel.

Scribbling Mill standing this afternoon.

At Leeds to-day—Very poor Market to-day—Got a Stamp<sup>1</sup>

for Narrow Cloth, Costs 3/-.

- 17 Sent a pointer Dog yesterday to Pocklington. Walling the wall besides the Necessarys—Slack of Work. We have plenty of Coals by us.
- 19 Řecd a letter from Pocklington saying they wd deliver Ash wood at Kexby<sup>2</sup> at their Expense at 2/6 Pr Foot. Writing a letter for George Nawthrop to his Son at Isla near Cadiz in Spain.

Fine Rain—Slack of [work] in Scribg Mill.

Cart at Leeds to-day—The finest weather ever seen for the time of the Year I think. Therm in the afternoon 64°.

25 Goes to Grimthorp to day; got there about 5 o'clock in the

afternoon found all well.

- 26 Very fine Spring Morning; bot some Ash wood of Mr Benson, Pocklington, to be deld at Kexby Bridge at his Expense at 2/4 Pr Foot.
- Never a finer Spring. Set off for home on the Coach got home about 8 o'clock. Dam gives over running out.

28 After Chapel in the afternoon went with Ino to Mr Spinks,

Kirkstall Bridge. Returned almost immediately.

29 Fine pleasant growing Rain. These is more Grass in the fields at the present than I ever remember to have seen at Old May Day; we have Grass in Mill close in which I cd drive a middling Swaithe—Mill standing this afternoon for want of work.

30 Netting our Dam did not get a fish out, Net too short. Cart

at Leeds to-day.

- <sup>1</sup> The die with which to stamp the seals to be affixed to narrow cloths.
- <sup>2</sup> Kexby, on the R. Derwent about midway between York and Pocklington

May I Rainy Morning but very growing—Jn<sup>o</sup> Vickers enters to Round about House<sup>1</sup> as Landlord to-day. Work not very plentiful in the Mill.

3 At Leeds this forenoon with 2 Blue pieces to Mr Leigh's.

4 At Leeds again this forenoon in order to get some table Cloths for Bridlington. Charg'd the table Cloths 18/-, 12/- & 10/6 each—Mill standing for want of work this afternoon; we have 6

Billies running when we are working.

6 Jnº & I at Bradford this forenoon trying to buy some Wool; did not buy any, got home to dinner. Fishing our dam with 2 Netts; got a Pike out which was put in on the 24 Sep<sup>r</sup>, 1809, which did not then weigh 3°z and now it weighs 5 lb.; we only got about a Stone of Fish out.

7 Very rainy Morning—Cart not at Leeds to day tho' it is

Tuesday; thot it too rainy for the Horse.

8 Money scarce. Mill standing this afternoon for want of Work—Roads bad.

9 Standing for want of work in the Scribb<sup>g</sup> Mill this afternoon.

Trade flatt. Got a Perch out of the Dam and put it in again after cuting the top finn on its back; the 4<sup>th</sup> bone is seperated

from the other; it weighed about 4°z.

Fine still growing Morning. Turning horses out into Close above Mill—also 3 Cows. Mowing grass in Mill Close for Horses; it is very thick and strong. An uncommon many people going by here to the opening [of] a New Methodist Chapel at Bradford. Lightening with heavy claps of Thunder this afternoon.

It is said there never was so flourishing a Spring in Man's Memory—Since Our hay has been done at the Mill Chas. Lord has found 40 stone according to Carriers own Acco<sup>t</sup>; this forenoon we have found 20 stone [of hay] & 28 Strikes [of] oats. I am supposing us both to be on a Balance so that on that acco<sup>t</sup> there is nothing to settle, for what oats is in Cash book is right.

Chas Lord pulling all side geer of [f] Scribblers in low floor & putting other geer on which is far superior for working easy. One of our Carriers goes to Leeds to help our folks with his horse to

bring some Ash Wood up to Bramley.2

14 Warm growing clear day—Cart at Leeds to day.

15 Pretty well for work this week. Packing my Cloths up to send to Pontefract. 4 Billies standing this afternoon for want of Scribbling.

16 At Leeds to-day to see my box in the store room.

- 17 Rec<sup>d</sup> a letter from Cap<sup>t</sup> Bischoff saying I was to be at Ponte-fract by 10 o'clock in the Morning.<sup>3</sup>
  - <sup>1</sup> It was an Inn at Stanningley.

<sup>2</sup> No doubt this was the ash-wood bought at Pocklington on April 26th

that had been sent by water from Kexby Bridge to Leeds.

<sup>3</sup> Rogerson left early the next morning to attend the annual training of the 'First Regiment of the Leeds Local Militia' at Pontefract. It was so early that he omitted to record his usual readings of barometer, thermometer and wind direction, but he took his thermometer and his diary with

18 Very fine Morning. Set of from home by 5 o'clock in the Morning, got there by 10 o'clock found part officers there before me,

they were at Breakfast. I rode our horse.

Delivering the Men their Cloths out, got done by 4 o'clock, did not see Cap<sup>t</sup> Bischoff till 5 o'clock which was our dinner time— Went to the Theatre at Night—saw the Pantomine of Perouse most wretchedly perform'd, came home by Eleven & went directly to bed.

20 Parading the men in the Horse fair, went to Church, heard the Vicker Preach, no very great hand at it—took a glass of wine with four of the officers at the star Inn & then took a walk as far as the grand Stand. I Lodge at the same place I did last time we were here at Miss Morley, Star Yard—I pay 10/6 Pr Week— Breakfast at the Star along with about II officers, pay 16d. Pr head—we are pleasant Company.

21 Adjutant Drill at 6 o'clock this Morning, I did not get there till 7 o'clock—I had no occasion to go at all. We have been again from  $\frac{1}{2}$  past 9 to  $\frac{1}{2}$  past 2 drilling the Men with Manuel Exarcise; they do remarkable well and improve fast. Writing a new list of the Men for the Serjeants—12 o'clock before I got to bed to-Night.

22 Fine pleasant day—did not go to the field to-day till I got my breakfast—Grenadiers & Light Infantry gone to fire ball to day the light Infantry put 150 Balls in the Target 5 of them was in

the Bull's Eye.

Capt Wormald's Company & our Company goes to day to fire Ball on Darrington Common; Cap<sup>t</sup> Wormald's Co put 92 Balls in to the target 7 of them in the Bulls eye—our Co put 153 into the Target 10 of them into the Bull's Eye also ten in the Leg—got back by 2 o'clock met the ..... other Cos present arms in Carlton. At the play to Night.

23 Practicing Marching in open Column.

24 Was to have gone to Darrington Common to fire with Ball but turns out a very Rainy Morning; recd a letter from Jane Greenaway. Went in the afternoon fired 10 Rounds.

25 Firing Blank Cartridges in the park.

him to Pontefract and made a note of the temperature each day with the usual comments on the weather, before recording the events of the day. He had joined the Militia in 1809, and the next year had received a Com-

mission as Ensign, as the following bill, on a loose sheet, proves.

Ensign Rogerson—					
1 Epaulette			1	15	0
I Sword			I	$\mathbf{II}$	6
I Belt Plate				15	
I Sword Knot				IO	6
$3\frac{1}{2}$ Doz. Coat-Buttons 4/				14	_
4 Doz. Breast Do. 2/				8	-
I Pr Skirt Corners				8	_
1 Gorget				9	****
Proportion of Aroge, &c.				I	9
			~	12	9
Leeds, 14 <sup>th</sup> Sept., 1810.	1810, Sep <sup>t</sup>	18th	Settled	•	

Marching in open Column.

Many people here from Leeds—Brother Jno here to day. Went on Mr Bischoffs Horse to Normanton to see Mr Hodghson he was gone to Wakefield.

Rainy morning—not in the field till 4 o'clock in the afternoon.

29 Rainy morning—Order'd to go to the Field at 1 o'clock Cl<sup>n</sup> Ikin Drilling the Subalterns in the star Room.

30 At the field this Morning by 6 o'clock. Marching the Men round the race course at ordinary time got home by ½ past 8 went

there again at ½ past Nine. Firing blank Cartridges.

31 Went to the field ½ past 9; met M<sup>r</sup> Hodghson & M<sup>r</sup> Bushby preparing the Men for to morrow's inspection—did not fire to day got back by I o'clock.1

June 10 Fine Morning—Chas. Lord repairing Stocks.

Cart at Leeds to day—Mill very well for work.

Got a tooth pull'd out this Morning.

- Begun to get stone for a new House—Painting the Mill Windows.
- Mowing grass for Hay above the dam. Posting Mill Books to day.

Fine Morning—Cart at Leeds to day. 18

At Leeds for Drawback—went to the Play at Night.

21 Population as taken by W<sup>m</sup> Farrar, Church warden & Jas. Jerrison, Overseer is as follows in Bramley.

		Inhabited hou	ises		655
		Uninhabited	$\mathrm{D}^{\mathrm{o}}$		13
1811	4	Building			8
		Families			700
	- {	Males			1767
		Females			1707
				-	

Wild but dry—It is very cold weather for the time of the 22 Year.

Cold wild & wet— 24

Inhabited	houses	in	Leeds	7854
Empty				29
Building				37
Families				8052
Males				16498
Females				19452
e emis				210

Mill rather Throng.

25 Cart at Leeds to-day. Staked a place out last Night for a house at top of town allottment. Market flatt to day. 26 Mowing the Clover we bot of Jonas Turner.

27 In Pudsey this morning seeing some Mahogany Chairs. Mill pretty throng.

<sup>&</sup>lt;sup>1</sup> There is a break in the diary for nine days, and when it recommences Rogerson is back at Bramley. During the period he was married to Miss Jane Greenaway on June 8th at Great Givendale Church.

July I Lett a Draw well to sink at the top of Bramley to Lumby, Stanningley, to sink 8 yards for 4 Guineas him to find every thing wanted except turn & Buckett.

2 Very sultry this Morning—Cart at Leeds.

3 Wild & Cloudy—Pay Day to day—not a good one.
5 Fine Morning—Begin to lead our hay this Morning.

8 Mill Standing this afternoon for want of work. 9 Dull still Morning—Cart at Leeds to-day.

Remarks on what kind of Mettle gone through in sinking our well.

July	I	Mould	I	Foot		
		Clay Sandy		Feet		
	2	Stone & Clay			6	Ins
	3	Loose sandy Clay	_	-	6	
		when water Ouzes through.				
	4	Loose Clayey scale as above				
		but rather stronger	4	Feet		
		Stronger Scale	I	Foot		
		Very Strong scale	I	Foot		
	_	Stronger Scale				
	7	Strong Scale				
	9	Found Water at 9 Yds from	S	urface	in	
		Strong Seamy Scale				

July 10 Stop'd at  $9\frac{1}{2}$  Y<sup>ds</sup> deep July 10 Fine Morning. Leeds fair.

Newton's, Farnley, respecting a wrong Note but have this day got it settled in full; we do not owe anything to them. Trade bad & payments ill made. Expecting going to war with the Americans some say it cannot be avoided; the English have suffered a deal to keep peace but that seems to make them worse. Fine afternoon for Hay. Wool is very low; Wool that was sold for £70 Pr Pack may be bot for £38 Pr Pack & what was bot at £40 may be bot for £28 Pr Pack.

12 Walling top of Well round, give 15/ for walling it. About Manchester trade is so ill that they may get 28 or 29 Y<sup>ds</sup> of Cotton

wove for 15s.

13 Begun hewing this Morning for new house.

- 15 Mill standing this afternoon. At Armley hill top in the afternoon.
- 16 Cart at Leeds to day. Mr Willson pulling an old house down next our croft at home. Mill standing this afternoon. Reported to-day at Leeds that they have taken the Toulon Fleet consisting of 9 Sail of the Line & 3 Frigates. It is sd they have been watching for them near 6 Years ever since Lord Nelson was kill'd.
  - 17 Cloudy Morning—Digging Foundations for New House.

18 Roads bad—Mill not very full of work.

19 Chas. Lord & us settling our Books— every thing is settled but as the Books stand.

- 20 Laying the first Stone of the house at 9 o'clock this morning, we put 10/6 under it which the Masons took out; on the stone which is on the East corner is sett 1811 & a hole made in it in which there is a penny a half penny and a farthing of George the 3rd coined 1806.
  - Bramley feast. Filling Boiler—Mill standing all day. 22

23 At Leeds to day with Cart—Trade very dull.

24 Walking to Kirkstall Forge with Mr Catton from Pocklington; at Leeds to night at the Circus.

Trade flatt—Jnº at Harrogate. Sinking the cellars & laying

the foundation at new house.

26 Hay time nearly on a finish.

It is reported this morning that the KING is dead.

28 Very warm—Jno comes from Harrogate. The cellar they are digging is quite different from the well; it is past getting down for small stone of several sorts. Sunshine heat to day at 10 o'clock is 90°. Mr Wilson [is] digging cellars for some Cottages besides our house in Bramley. Father is likely to have part disturbance with him, he wants to take in a road we have at the end of the old houses. We have got to the bottom of the Cellar in some places; we have found a very fine Spring of Water it comes in a Rock & therefore hopes it will not be a failer in great droughts.

29 Cart at Leeds to day good load of Wool home. The New

Bank Tokens of 3/- value circulated in Leeds to day.1

30 Begun building the Cellars up to day. Chas. Lord & I at Lister and Haley Mills looking at their dry houses; find them far superior to ours.

31 Broke a small wheel on Willie.

- Aug. I Dull this Morning—Pretty well for Work this week.

  2 Cart at Leeds to-day. Pulling our dryhouse down in the Inside.
- Cart at Leeds to day. Rainy Day—Bought some plank for new house.

5 Dull Morning—Mending dryhouse up.

6 Cart at Leeds to day—We are full of work this week. Father went to Doncaster on the 5<sup>th</sup>.

Got a new Slubber to day—Arching the Cellar.

I have not seen any corn cut in this neighbourhood yet. Wool is very low at Doncaster fair; their low lofty clean wool was sold as low as 10/- & 11/- Pr Stone 15 lb. to Stone; Walesby Wool in Notts was sold only for 19/ Pr Stone same wool last year was sold 55/ Pr Tod.

12 Putting Plint Coarse<sup>2</sup> round the Building. Rec<sup>d</sup> a letter from

Ino dated Selby.

- 1 "The scarcity of Silver Change....is....likely to be soon removed, the Directors of the Bank of England having intimated to the Mayor of this Borough that a supply of Three Shilling Bank Tokens to the amount of £8,000 may be had on application at the Bank, for the use of this town and neighbourhood"—Leeds Mercury, July 27th, 1811.
  - <sup>2</sup> The plinth course, above the foundations.

13 Cart at Leeds to-day—Making  $6\frac{1}{2}$  Days in the Mill this week—Most Mills round are standing near half of their time.

14 Bolts in the Inside of Air Pump worn in pieces, oblig'd to

stop.

15 Father & Jnº arrived home from Hull to Night.

16 Mill beginning at 5 o'clock this Morning—Jno Stead by my Father's orders throwing the Wall next W<sup>m</sup> Dentons down—belonging to M<sup>r</sup> Wilson.

18 Fine still Day—People has begun to cut their corn here.

19 My Father with the interferance of Mr Webster & Mr T. Pawson, Farnley, got all differences settled with Mr Wilson which is as follows—We are to take the piece of land in at the west end of his house next the town Street all but 2 Yards next his Coal houses; he is to have the ginnil or passage, but is to be 18 Inches of the wall of our mistall or Stable on the west Corner, but on the East corner he is to throw his buildings back from Wm Hunts house corner next old Davd Wainright's house 3 ft. 6 in. He is to have no lights backward & those that are in are to be wall'd up; we are to have liberty to build close under his eaves if we think proper.

20 Wild Rainy Morning—Cart at Leeds to day but I was not there. I understand there has been only an indifferent market

for Cloth but we are throng in our Mill.

21 Laying the first coarse of stones above the Plint.

24 Fine still Harvest Morn, but looks very heavy. gone to Woodhouse for 2 stones for front door Jambs.

26 Slubbers not working this afternoon all gone to Pudsey feast.

27 Cart at Leeds to day—Jno goes to Selby. Mill standing the whole of the day owing to the feasts. Set the front door Jambs up to-day.

29 Leading Oats yesterday of Swinnow.

- 30 Fine Harvest day—Leading Timber from Kirkstall Bridge for house.
- 31 Plenty of Work in our Mill—Yesterday Hutchinson Mill Holbeck, Burnt down¹. Byram [is] building a Stable above the houses.
- Sept. 2 At Leeds this afternoon—Saw the first Stone of the Sessions House laid by the Corporation<sup>2</sup> many people there.

4 Uncommon fine weather—Armley feast—I was there.

- 5 A very fine harvest—Went to Armley feast got there to Tea—Got an Irish Ox and 2 Cows from E. Wright & Sons, Armley; they
- ¹ "On Thursday last, at midnight, the Scribbling Mill at Holbeck, belonging to Messrs. Hutchinson & C°. was discovered to be on fire, and notwithstanding the fire-engines of Messrs Marshall & C° & Messrs Fishers & Nixon, both very near, were brought promptly to the place...the roof of the manufactory fell in within half an hour...."—Leeds Mercury, Aug. 31, 1811.
- <sup>2</sup> The New Court-House and Prison was built 'at the south-east angle of the area of the Square in front of Park Row' and opposite the Coloured Cloth Hall.

cost £30, they were taken in part of a payment of a Dividend of 5/ in the Pound.

6 Widening a road at the top of Bramley at Josn Pearts house

end—a good Job [too].

10 At Leeds to-day. Saw at Leeds to day for the first time a

Bank token value 1/6.

II Set of this morning for Grimthorp, got to Pocklington by one o'clock—got to Grimthorp by 5 o'clock found M<sup>r</sup> & M<sup>rs</sup> Marshall (?) Son along with them at Tea.

12 Went a shooting to-day very hot.

13 Very hot day—got my dinner at Pocklington.

14 Very hot day—got home to Night.

16 Harvest near all in—It is s<sup>d</sup> it is the finest ever known. A Comet<sup>1</sup> to be seen every Night when the weather is clear in the N.W., its tail is s<sup>d</sup> to be between 20 & 30 Millions of Miles long.

17 Cart at Leeds to day—Very poor Market to day.

18 Fine pleasant harvest weather. At Leeds this afternoon.

19 At Leeds to day for Drawback.

We are pretty well for work in the Mill. Sam¹ Myers, Mason, went yesterday to Woodhouse Quarry to find an half pace² for house; they want 30/ each.

22 Sunday—Fine Morning. Mrs Barrow from London at our

house.

24 Fine & still—At Leeds to-day.

25 Father goes to Bridlington; the whole of the day very wet.

- 26 Roads very bad—Very rainy forenoon—getting half pace up at the house.
  - 27 Cold wild & rainy—Pretty well for work.

29 Very fine day. At Horsforth to-day.

Oct. I Dull rainy Morning—At Leeds to day.

2 At Leeds this afternoon to Meet a Wedding.

3 Fine pleasant Morning—Went this Morning to M<sup>r</sup> Spinks, Kirkstall Bridge; took a walk along with M<sup>r</sup> and M<sup>rs</sup> Coupland, Miss Coupland and Miss B. Greenaway to the Abbey and Forge, got home to Dinner; [it] begun to rain about Tea time, rain'd very heavy about 9; they were weather bound, all stop'd all Night.

Dull rainy Morning—At Kirkstall in the afternoon.

6 Took a Walk as far as Armley in the afternoon.

7 Begun lighting with Scriblers to Night. 8 Dull cloudy & rain—At Leeds to day.

to Very fine still Morning—Father gone to Bradford.

- II At Leeds this afternoon bo<sup>t</sup> some fine Grey Wool for £33 P<sup>r</sup> Pack Money.<sup>3</sup> Exchang'd some Bear Skins with M<sup>r</sup> Grace for Timber. Bo<sup>t</sup> some furniture: I Doz<sup>n</sup> Mah<sup>y</sup> Chairs Pair of Drawer a Card Table & a circular Dressing Table.
- <sup>1</sup> The great Comet of 1811–1812. On September 7th the *Leeds Mercury* reported that "Last night the New Comet was very visible at this place from 9 to 10 o'clock."
  - <sup>2</sup> A stone flag to serve as a shallow step—a half step or pace.
  - 3 'Money,' equivalent to the modern 'cash.' Used again on Nov. 20.

Dull still Morn. Jno Waites Mowing Barley. 12

Cart at Leeds to day—We are pretty well for Work in Mill. 15

Both our carrying carts gone to Leeds to day. 16

- Fine pleasant day. Our team leading Seak on to Close, the 17 other side of the Close.
- Very warm weather for the time of the Year, 'tis said it is owing to the Comet.
  - Our people at home has led from Mill  $8\frac{1}{2}$  Load of Manure.
- Fine pleasant day. Mr Harling from Thorp Arch at our 20 house.
- W<sup>m</sup> Perigo is appointed by a great number of the Inhabitants to carry letters to & from Leeds every Morning; he went for the first time this morning, he has 2d a letter up, Id down; he had 2 up and 4 down—the letters were all for us all ours.
  - Cart at Leeds to-day—Pretty fair Market for fine Cloth.

Making books up for Mill pay Day. 23

Cart at Bradford to-day—Jnº Waites leading Barley. 24

Slack of Work in Scribbg Mill. Uncommon pleasant Day. 25

At Leeds to day buying 12 In. plank at 15d Pr Foot. 26

- 28 Fettling the boiler—Mill standing the whole of the day. Writing Notes out for Mill pay Day—Jno at Bradford Father at Leeds.
- 27 I was not at Leeds to-day—Cart there. I have got my Notes ready which are as follows—

Bramley	56
Pudsey	34
Farsley & Rodley	13
Stanningley	20
	123

30 We have £1822 in our Mill Books. We are rather slack of Work in the Mill—Delivering Notes out for Mill & Ware pay Day, which is to be at W<sup>m</sup> Spence's, Sign of the Pack Horse, Bramley. We pay for this pay day which makes Chas. & us equal.

31 We have four Billies standing to day.

Nov. I Wrote a letter to Cowburn's Garden, Otley, to know the price of about 500 Trees of several sorts. Mill slack of Work. I heard my Mother say that she had sold many a 24° of Butter for 7d.

5 Dull wild rainy Morning—Cart at Leeds to day.

6 Our pay Day for the Mill at W<sup>m</sup> Spence's Jun<sup>r</sup>—I have seen us have a worse—We had to pay for 41 People at Supper at 18d Pr Head, Ale & Glass & Tobacco, [it] cost about £6 6s.

7 Work scarce in our Mill—we are at the most only making five days in a week. Our Cart gone to Bradford this afternoon for

Wool.

8 Ice this Morning-Leeds fair. Rearing our house at Grove hill. Masons & Joiners in great spirits in expectation of plenty of Ale & a good Supper. A finer day for Rearing there cannot be there is scarce a morsel of Wind.

9 At Leeds fair very fine day—bot some timber for Spouts,

gave 5/ Pr Foot for it.

Work [as] scarce in the Mill as I have seen it this long time— Our horses begun to lie in on the 9<sup>th</sup> Inst.

At Leeds to day—Markets very poor.

13 Chas. Lord gone this morning to pay the Low Moor Co off. Mill standing this afternoon for want of Work.

15 A Complete Hurricane of wind & rain the whole of the Day. Chas. Lord & I settling our Books up to to-day: all my Books are look'd over which is approv'd; we have not settled for his Millwright work for the last quarter, nor am I pd for my wood or my Father for the Potateos he has had of him. I have settled with him for what Money I recd for him of B. Roberts.

Lord Cardigan down to see his Estates in this Country. Taking one Wm Meek of Bramley with a Warrant for stealing Cloth out

of the Cloth Hall.

17 Put a Fish into the Dam which may weigh  $\frac{3}{4}$  of a lb. I suppose it to be a carp. Mill running but have 4 Billies standing

Lord Cardigan has order'd the Trustees of the late Mr Oddie to carry on Bramley Fall and has this day accepted them as Tennants.

17 Dined with My wife Sister & Brother at Mr Spinks.

Agreed this morning with Jnº Lancaster, Painter, Horsforth, to paint my house for £13—All the woodwork both inside and out twice over with common white oil paint or any other color of equal value: this includes cupboards, Doors, fire places, spouts, Wash boards, surbases, shelves, in short all and everything that wants paint belonging the house only; also for the above he paints us the large parlour twice over & all the passage from the front Door up to the very top that is to the Ceiling: he is to have £8 as soon as he has done with the woodwork, the other is to lay in my house till such times as I think proper to have the passage & Room painted, which is to take place as soon as they are properly fit to do. N.B. Lancaster has nothing to do with any other walls but those specified —He agreed without the room & passage painting to do the other for f.9.

Cart at Leeds to day.

20 Brother Jn<sup>o</sup> got a Justice Summons from one Jn<sup>o</sup> Waterhouse, Mason, Stanningley. Putting Chimney up at my house. The Plumber has offer'd me lead for my house at 4/ Pr Stone, 16 lb. to Stone, Money. We are rather better off for Work in the Mill this week than we have been for those last few weeks back. The Comet is very fair to see to Night in the SW.

21 Very fine day—At Otley to-day to buy some trees, took one of our Carriers & Cart with me. Bot the following of R. Cowburn, Otley, part of them came off the Chevin Side, the other

sycamores from New hall—

	£	s.	d.
100 Beeches		4	,,
400 Sycamores		14	,,
40 Limes		9	,,
150 Scotch firs		5	3
40 Blk Poplars		3	4
50 Elms		I	3
100 Oaks		3	,,
20 Horse Chesnuts		I	6
Io Sph Chests		I	,,
	2	2	4

Very fine still Morning—Our folks sowing Wheat on Swinnow. Planting a few Trees in S. corner of Grove hill Close. Ino

planting a few opposite old Simons house.

23 We are pretty well for work tho' I suppose several mills are standing. Jno finished planting trees on the End of the Croft. Uncommon pleasant clear day—Putting the second chimney on the South End of the house—Pd Jno Barnes rent 52/ up to this night. My wife this afternoon delivered of a Daughter—20 minutes before 4 o'clock in the afternoon.

Very fine still Day—M<sup>r</sup> Humphrey named our child Maria.
Planting trees in low Corner of Grove hill. I understand

that Ross Mill was once a Corn Mill; it was the Soke Mill for

Bramley.

26 Čart at Leeds to-day—Brother Jn<sup>o</sup> Proves Waterhouse a false fellow. The M<sup>r</sup> Bischoffs gives me some trees of different sorts to plant. My father got a quantity of old writings in Parchment respecting the gifts to Kirkstall Abbey & other places in Latin. They are very excellently wrote in an old & beautiful hand—there are several seals affix'd to them some of which are pretty plain to see.

Fine still pleasant Morning—The finest weather for the time of the Year I think I ever saw. The old Parchments above spoken off we got of M<sup>rs</sup> Wood, wife of M<sup>r</sup> Joshua Wood who lived in the house near the Broad Dike in Bramley; I rather suppose it is an

old family in Bramley. At Leeds this afternoon.

28 Planting a few more trees at Grove hill. Putting the front spouts up, also the last of the Chimneys belonging the house—Jno Akeroyd dangerous ill. Cart at Leeds to-day for wool—We are likely to be throng in the Mill. I can only faintly see the Comet to Night in the West. Wheat now about 37/ or 38/ Pr Load.

29 Very throng Dying in our pans to day.

30 Gave our Slubbers 21/ for to make a wake supper.

Dec. I Went to Armley this forenoon to see Jno Akeroyd;

he was rather better.

2 Leading flags to house—Beginning to Light to Night with Billies. Money very scarce—Gregson begins to wall our Right in at the end of M<sup>r</sup> Benj<sup>n</sup> Wilsons houses—M<sup>r</sup> Wilson wall'd his back windows up the last week; my father tho<sup>t</sup> he w<sup>d</sup> not take in his right till M<sup>r</sup> W. had done his part of the agreement.

3 Dull wild rainy Morning—at Leeds to day—Cart very heavy

loaded with wool but did not get a shill g of Money.

4 Throng in the Mill. Heavy showers of Snow in the after-

noon—Roads very ill.

5 Yesterday M<sup>r</sup> Webster staking how the fence was to be straitened between Lord Cardigan's & our garden at home. M<sup>r</sup> Webster was saying [that] in Howley Park there is a stone with this on it:

"Nevison Kil'd Fletcher 1648"

Mr Webster was saying that a Copyhold Estate was better than a Freehold if the fine was certain for the following reason: a Freehold Estate costs a great deal when sold in conveyancing whereas a copyhold estate can be transfer'd for about 7/6; they have only to interweave a wheat Straw in Piece of Parchment and seal it & have it enrol'd in fealty Book and it is as good a title as can be.

Bitter cold & wild afternoon—A person from Denholmes has

offer'd copperas at £6 10s. Pr Ton.

I have been this afternoon on to the top of Coal hill on the Road Side going to Farsley opposite this end of Geo Carter's Field to copy from a stone that stands there but which is now partly defaced, particularly the day of the Month, & whether it be the 2<sup>nd</sup>, 21<sup>st</sup> or 24<sup>th</sup> of June I cannot say but 2 is very fair to see. I was very particular and [it] is on the other side verbatim; it is defaced by boys throwing stones at it—The stone is as on the other side in shape.

June

Be it remembered
that no Tenants or owners
of Lands within the manor of Calverley
have any right title Interest or Claim
for their Cattle to feed upon any part of
Bramley Common except on that part
called Coal-hill and there only by virtue
of a Grant from the Abbot of Kirkstall to
John of Calverley in the Year 1311 at the Rent
of two Shillings Per Year which rent has
hitherto been duly paid and now is paid
to the Right Honorable Earl of Cardigan
Lord of the Manor of Bramley.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> The story of the highwayman Nevison and in particular of Fletcher's attempt to capture him is told at some length in Norrison Scatcherd's *History of Morley*, 2nd Ed. (1874), pp. 122–3. The inscription on the stone is there given as "Here Nevison killed Fletcher 1684," and it is stated to have been "cut and engraved by John Jackson, the schoolmaster of Lee Fair."

<sup>&</sup>lt;sup>2</sup> The grant is to be found in *Calverley Charters*, Thoresby Soc. VI, No. 202. The area is not named but is defined as 'that common pasture of Bramley which lies to the west of the town and stretches from the stream called Bagley Beck towards Calverley....up to the new ditch towards Bramley.''

6 Slating my house—A Sale in the Fall of all the tools, old stone & Planks &c of the late Mr Oddie.

'Tis said that the stone and tools which my Brother, Mr

Spink & M<sup>r</sup> Waddington bo<sup>t</sup> Yesterday is worth £200 buying.<sup>1</sup>
9 Bradford Fair. Got a Horse on Trial from R. Sellars, Card Maker, Wike. Translation of one of the Parchmts we got of Mrs Wood which is in my Possession—viz.,

This is a Covenant made between the Church of St Mary of Kirkstall and the Church of the holy Trinity of York To Wit that the Monks of Kirkstall shall pay annually for ever to the Monks of the Holy Trinity of York Seven Shilling Sterling below at York for the Tithes of the Mills of Bramley And that this agreement may remain for ever confirmed and unshaken it is ratified with the seals of both houses Witness the Chapter of both that the Monks of Kirkstall.....of the aforesaid Tithes in consideration of the aforesaid Seven Shillings.

M<sup>r</sup> Humphrey, the Person who translated it says it is Barbarous

Latin & full of Contractions.<sup>2</sup>

<sup>1</sup> The sale marks the completion of the negotiations for the new lease of Bramley Fall. On this day the newspapers contain the advertisement of the new firm as follows:

"Bramley Fall Stone Quarries.

Near Leeds, Yorkshire.

"Bramley Fall Stone Quarries. Near Leeds, Yorkshire.
The Public are most respectfully informed that James Spink, John Rogerson and J. Waddington have entered to the above Quarries, under the Firm of 'The Bramley Fall Company,' lately carried on by the late Mr James Oddie, under the Earl of Cardigan.

Stone from the said Quarries may be had for Iron Rail Ways and for all Purposes, in the Rough or Dressed, for setting to any Dimensions, at the shortest Notice, to any part, wherever the same may be wanted.

Specimens of the said stone may be viewed in Works upon the Aire & Calder Navigation, Ferrybridge, the Foss Navigation, Market Weighton Navigation, the North Bridge & Docks, Hull, Yorkshire.

Also Wapping Docks, London, and the Martello Towers, on the Coasts

of Kent, Essex and Sussex, &c., &c.

The Stone is allowed by experienced Engineers, &c., to be of the best Quality for Locks, Bridges, Docks, Aqueducts, or any kind of Water-Work whatever, as it consists of an open Grit.

All Orders will be duly attended to, and gratefully acknowledged by

the Public's most obedient and humble Servants.

James Spink, John Rogerson, J. Waddington. N.B. Bramley Fall is situate close to the Leeds & Liverpool Canal so that Stone can be shipped to any Part of the Kingdom.

<sup>2</sup> There can by very little doubt but that these Kirkstall 'Parchments,' to which reference was first made on November 26, passed into the possession of the church at Bramley for the Vicar now has this one and several others. The one here translated is identical with charter No. cccxlviii in the Coucher Book of Kirkstall Abbey, Thoresby Soc. viii. It is in reality supplementary to the original composition between the two Houses as to the tithes on lands in the parish of Leeds. When mills were erected at Bramley the Monks of Kirkstall, who held the manor of Bramley, agreed to increase by seven shillings the annual sum due to the Convent of Trinity Priory in lieu of tithes.

It will help to explain other references in the Diary to add that after the Dissolution the manor of Bramley was granted to Sir Robert Savile of Howley Hall and passed by marriage through the Duke of Montague to the Earl of

Cardigan.

In expectations of the Markets being still worse than they are at the present [for] the News from America breaths nothing but War.

10 At Leeds to-day. Pretty fair load of Wool home—Sent some Table Cloths of to Burlington<sup>1</sup> Directed for Mrs Coupland.

II Beginning to Flagg the Cellar at my house. Our Carrying Cart gone to Leeds this afternoon for Lead for Riggings.<sup>2</sup> Methodists begin now to Christen Children in their Meetings-We are

pretty well off for Work in our Mill at the present.

12 Putting lead on Top of house. Finished slating to day. Pd Thornton in full for striking & slating my house—for 24 Tons Slate at 3/ Pr Ton £3 12s.—193 Yds of Slating at 4d Pr Yd £3 4s. 4d.; also pd him for Striking II Tons at 2/9. If I had had the house slated with Blue Slate at 4/6 Pr Yd as people wanted me it wd have cost me £42 8s.

Our People at home stubbing the old crooked fence up between Lord Cardigan's estate & our garden in order to make it straight.

Wild & wet Night.

13 Mr Sharp and Mr Robins Dining at our house to-day—Work at the present very fluctuating; last week scarce could tell how to get all dyed this week only have had 3 Cloths dyed—the consequences of course must be a scarcity of work which we expect.

14 Fine sharp frosty Morning—Beginning to flagg our Kitchin. Agreed with Jno Dufton Jur for him to pay me 5/ Pr Week till all he owes be run'd out & if he does so I pay for the Summons.

Dull still day—Jnº sets off for Hull and Linconsre.

Putting the windows in my house.

At Leeds to day. Poor market for cloth to day—4 Billies standg.

We have got all the windows in the house & the Kitchin Door hung—We are slack of work, we have given over lighting for this week. The weather very variable.

19 Setting garden wall out & beginning to lay boards on Kit-

chin floor.

Rec<sup>d</sup> a letter from Brother Jn<sup>o</sup> dated Hull wishing me to meet him at Selby with a Horse on Sunday. Mr Geo Bischoff, Leeds, call'd to day to look at my house.

Chas. Lord fastning one of the Bos's belonging the drivers.

Fine pleasant still Morning like Spring.

The quantity of Land in Bramley according to the Regulation this Year and Measurement of the whole by Jont<sup>n</sup> Taylor,<sup>3</sup> Land Surveyor, Leeds, is as follows—

46 2387

But the former Measurement) A. R. P. was only as in the old Book 2120

There is 54 Acres of Woods and 75 Acres of Rivers also 8 Mills and 670 Houses

The above Regulation cost in Planning & Surveying to Jon<sup>n</sup> Taylor £88 6s. 9d.

<sup>1</sup> Burlington, the older form of Bridlington. <sup>2</sup> Rigging—the ridge of the roof.

<sup>&</sup>lt;sup>3</sup> Taylor's Plan of Bramley is now at the Bramley Rate Office, though the Survey Book is lost.

20 Chas Lord & me went this afternoon as far as the Park Spring to look at some Oak wood for Stoops & Rails for my house; they had about 5 Feet in each tree; they ask 2/8 Pr Foot & 20d

Pr Pound for Felling wage.

At Leeds this morning delivering a piece of Blue Cloth to Mr Leighs—at home at ½ past one—Glass Rising like for frost—at Mr Spinks to night—A many serious Robberys about Leeds this week. S. Walton Mill advertiz'd to be Sold.

Very frosty Morn. I go down to Selby to-day with a Horse for Brother Jno; got there about one o'clock stop'd all Night.

Fine Morning all frost gone—set off for Home got both of us to Leeds by one o'clock. Wild evening.

Fine still pleasant Morn. At Leeds to day.

Fine pleasant still Morn.

Ino sets of this morning for London—At Leeds for Draw-

backs to day.

27 Lent Jnº Newton my Horse to go to Selby on account of the Bramley Fall Co. Work scarce in our Scribbling Mill; in Cloth Mill pretty throng. Went this afternoon as far as the Plantation above Horsforth to look at some Fir Trees that were fell'd; did not buy any.

28 This day at 8 minutes before 4 o'clock in the morning my little Daughter Maria departed this life aged 5 weeks; sent a letter to Brother Ino to London to inform him off the circumstance.

At 35 Minutes after 2 o'clock snows very fast. My little Maria has for 2 or 3 days back seem'd rather unwell but had no idea it wd terminate in her death.

30 Buried my Daughter this Morning at Armley Chapel under

the 6th Tree from the N W. Corner.

31 Cart at Leeds to day—I was not there. Mill slack of Work— Chas. Lord repairing our Stocks. I have made a Calculation to-day & I find our Mill has clear'd this year from the last first of Jany to now £1150 clear money. Thawing this afternoon. Plenty of Coals by us. Cart & horses at home leading stones for garden wall— The last Tuesday in the month as well as in the Year—On the 29 Inst Wm Perigo, him who had to deal with Mary Bateman, got Married. Money is very scarce, we feel the want of it very much, the Clothiers will be serv'd the first. Last Night I understand Chas. Wood bot S. Walton Mill.

Rec<sup>d</sup> a letter from Jn<sup>o</sup> from London. Had Rooley Staiths Book keeper here with their Note; told me they had advanced their Riddled Engine Coal to  $4\frac{1}{2}$  Pr Ld, to take place to-morrow—

1 Leeds Mercury, December 21, 1811.

Steam Engine and Machinery at Farsley

To be Sold by Auction. By Mr Craven.
Under and by Virtue of a Writ of Fieri Facias on Wednesday the  $I^{\rm st}$  Day of January, 1812, and the following Days; at the Mill and Premises of  $M^{\rm r}$  Samuel Walton, at Farsley.

A Capital Steam Engine of 30 Horses' Power; together with all the Machinery and Stocks in the said Mill for scribbling and Carding Wool, and fulling Cloth. And also, all the Household Furniture, Farming Stock, &c., of the said Samuel Walton." Wednesday

Jany 1st 1812

Jan. I Wild Morning snow nearly all gone. Roads dirty-Took a Ride this Morning as far as Calverley Carr to try to buy some white Cloth only bot 2½ Yds. It is five Years to-day since our Mill started.

2 We have as many Coals bye us at the present as we suppose

may last us burning about 10 Weeks.

Money very scarce—We are running till 7 oclock with 2 Billies & all the Scribblers those 2 Nights.

Pretty thick snow. Sharp frosty Evening. Took a walk this afternoon as far as Kirkstall.

- Cloth Mill standing; they are fastning the Catch Boxes— At Leeds to day. I never saw a worse day for money in my life.
- We are only running [during] day light in the Mill. To day at 12 Oclock the Leeds Commercial Bank stop'd payment.

Flagging the passage. Rainy Evening.
This Boldero Bank London being made Bankrupts makes

strange work here.1

Recd a Return'd Bill from Reyner of Dudley Hill, of Boldero & Co. Drawn on Jno Varley, Stanningley, Value £19 17s. 6d. Brother Jno arrives home from London.

Fine pleasant Day—at Armley Chapel.

Work scarce—Plasterers preparing Lime for Pointing my 13 house.

Fine pleasant day—At Leeds to-day. 14

Plasterers pointing my house.

Mill standing for want of work—Wheeling the earth in front 16 of my house.

Settled with Jnº Hodghson, Park Spring, for Hewing Work

in full by his man—£15 12s. 10d.

At Leeds to-day buying Plank & Timber for house-Market very flat.

Got another return'd Bill back of Fenton Scotts &c 20

Still fine & Frosty—At Leeds to-day. 21

Very fine Winter's Day—Trade very flatt.

Still dull day. At Leeds to day.

Plasterer beginning to latt the House—Fenton Scott, Nicholson, Smith made Bankrupts.<sup>2</sup> The Americans declare War to be necessary against England—Work Scarce, but Money scarcer.

1 " Postcript (By Express) London, January 2.

Extensive Failure in the City.

We are extremely concerned to hear that the old and respectable Banking-house of Messrs. Boldero, Lushington & Co stopped payment this morning "-Leeds Mercury, January 4, 1812.

2 "Leeds, January II....it is now our painful duty to add, that this failure has involved consequences more distressing to commerce in this part of the country, than any stoppage during the present calamitous war. ..... the Banking concern of Messrs. Townsend & Rishworth, at Wakefield, experienced on Saturday and Monday what is called a severe run. ..... we are compelled to add, that on Wednesday last, at 12 o'clock, 28 At Leeds to day—Only 2 Billies running to day.

30 Begun to Plaster my house to-day.

- 31 Mill slack of work but still we suppose to [be] better off than any of our Neighbours.
  - Feb. I Carrying Cart at Leeds to-day. 2 Wrote a letter to Mr Horseley, Hull.

3 Setting a few Elm & sycamore trees on Dam side.

4 First Tuesday in the Month—Cart at Leeds. 5 Fast Day—At Low Moor buying Ranges &c.

- 6 Dull still Rainy Day & excessive dirty Roads—Mill very slack of Work—Rec<sup>d</sup> a letter from Hull.
  - 7 Fine pleasant still Morning—Sent a letter to Bridlington.

8 Mill slack of Work.

10 Putting Pump down at house.

- Rec<sup>d</sup> an Acco<sup>t</sup> that the Money my wife had in the Stocks was sold on the 8 Feby & had paid it into the hands of Robarts & Co., Bankers, London: the Total Sum was £656 7s. 4d.—£150 of which I this day drew out; the remainder I order'd to be put in my father's name. I draw it out at Messrs Greenwoods & Co., Bankers, Leeds. P<sup>d</sup> M<sup>r</sup> Rayner for his Brother £20 in Cash at M<sup>r</sup> Cass for a return'd Bill & in part of payment for his Coals. P<sup>d</sup> Saddler in full—P<sup>d</sup> Clarkson, Tallow Chandler, in full—Mill standing this afternoon.
- Rather better market for Cloth—Burying a Man of the name of Ja<sup>s</sup> Butler at the Ground belonging the Methodists Chapel, Bramley; he was the first there was buried there & the first I have heard buryed at the Methodists anywhere.
- 13 Setting ranges at house—Mill slack of work. Yesterday  $P^d$  Wm. Spence  $Jn^r$  in full for the last pay  $Day^1 \not = 6$  2s.  $7\frac{1}{2}d$ .; this my father has paid out of his own pocket which makes us equal with Cha<sup>s</sup> Lord; the future pay days will be each to pay in proportion to his share.

15 Wild Cold Morn—Ground covered with snow—Masons not

working at house to day.

18 The Restrictions on the Prince Regent done away to day.

19 At Harden above Bingley to see Henry Wilkinson respecting the Estate opposite our Mill.

20 Posting Mill books. Carried Benj<sup>n</sup> Robinson Cloth back

undone—they are a bad breed. Cart at Leeds to-day.

21 Uncommon throng in Cloth Mill—Scribg Mill only slack.

22 Closed our Books to Night for the pay day. Only an Indifferent Market to day at Leeds; this Prince Regent does not offer to mend things much—ordered the Carts to give over fetching the Coals from Rooley Staiths.

the Banking-House of Fenton Scott, Nicholson & Smith, of this place, known by the name of the 'Leeds Commercial Bank,' stopped payment, to the surprize and consternation of the whole town and neighbourhood'—

Leeds Mercury, Jan. 11, 1812.

<sup>1</sup> See the diary for Oct. 26 and Nov. 6, 1811. These financial memoranda, especially such as relate to the partnership with Chas. Lord, are usually marked in pencil in the margin.

24 Writing Notes out. In my large parlour back wall next Kitchin I put some pieces of wood to drive nails in if wanted; the distance from the Inside of Passage wall towards Garden to the Middle of the wood is 6 Feet & 4 feet from the Surbase; also one 8 Feet from passage wall & 3 Ft.-11 from Surbase. Joiners finishing the Kitchin—Dining at Mr Waddingtons along with Mr Spink & several more—

26 Delivering the Notes for the Mill.

27 Cloth Mill very throng; the other night we run all Night for the Stocks—Plastering our Kitchin—Masons working the Sinkstone.

28 Work scarce in generall.

29 My wife sets of by the Trafalgar Coach this morning for Grimthorpe; Brother Jno goes with her as far as York.

Mar. I At Mr Trickets Chapel this morning saw a woman

dip'd.

Slack in scrib<sup>g</sup> mill—particularly fine work.

- Cart at Leeds—Snowy Day—Rather better Market for Cloth.
- 4 Pay Day for Mill at W<sup>m</sup> Spences. Rec<sup>d</sup> a letter from Bridlington. Masons beginning to dig the foundations of a house for Thos. Brashaw in the lane opposite the Plantation—Pay Day full better than that last year at this time; it cost £6 6s. od.

  5 Wild cold Morning—Jno goes to Liverpool this morning.

Pd Jno Dixon Blacksmith in full up to this day.

Blows an Hurricane with showers—Laying the floor over little parlour.

Finish day but cold—Jno comes from Liverpool.

9 Chas. Lord tightening the holding down Bolts that goes through the Ashlar wall in Engine house. Sent the boards over from Mill for large Chamber at my house.

10 Cart at Leeds to-day. Pd Wilkinson & Co. in full—Pd

Westerman & Co. in full. Pretty sharp Market for Cloth.

II Jas. Elsworth sent some wool which we suppose to have been stolen, we have sent for him down. Rec<sup>d</sup> a letter from my wife dated Grimthorp. Boarding large chamber at house. Work in Scribg Mill scarce; in Cloth Mill very throng.

At Leeds this afternoon turns out Rainy.

13 Preparing things to day for my Journey in the morning to Grimthorp.<sup>1</sup>

29 Set off from Bridlington Quay, got to Grimthorp that night; got the chaise fast in a Drift of snow near Bishop Wilton Beacon, had to send to a farm house for Shovels to shovel them out with, got to Mr Marshalls by 6 o'clock.

30 Set of next day for home—Very Rainy day; got home about 7 o'clock in the Evening found all pretty well. We have had very wild wet & Snowy weather the whole of the time I was at the Quay;

the snow here has been 5 Yards deep.

<sup>1</sup> Another break in the diary for a fortnight during his holiday.

31 Wet Morning at Leeds to-day. Bot a few things towards housekeeping.

Ap. I Snowy Morning very uncomfortable Weather. Roads very Bad. Mill pretty fair for work but on the Slack side.

6 Roads good. Putting Cornice up on Staircase window.

7 Cart at Leeds to-day—Wheat in general looks well.
8 At Leeds to-day along with Wife buying several things for the House.

9 At Leeds to-day again with cart to bring the things away

I bought—Jn° goes to Hull.

10 On the 8th Inst begun mending old boiler up—Very little corn sown yet. Yesterday Bo<sup>t</sup> a Silver Teapot cost £8, also a

cream Jugg, it cost 40/.

Disturbances at Manchester; they carry it is so their dislike to the Prince Regent so far as to publickly burn his effigy at the street corners. Mill this week has been pretty fair for Work, see day Book.

Went out of the Chapel with 6 or 7 Constables to see after

the Gamblers, found and took one.

14 Fine but sharp white frost. Cart at Leeds. Flatt markets.

15 Disturbances in various parts, several lost their lives at Cleck heaton at Mr Cartwright's Factory. At Leeds this afternoon getting Locks hinges &c for doors at the house. Scribbling Mill standing all day. Cloth Mill running—Several anonymous letters found in Bramley Sign'd General Ludd, saying they w<sup>d</sup> pay those a visit who did not settle their Meal &c. Many Soldiers in Leeds in readiness to March at a Moment's warning with their Pieces flinted & in marching Order.

16 Dull with slight snow—Mending a Stock.

Fixing part of our doors up at the house. 18 Finished garden wall—Mill slack of work.

20 Roads very dry & dusty-Mill slack of Work. Removed this day to my new house, no rooms completely finished but the Kitchin. Mill standing this afternoon having worn a Neck round in one of the coupling Boxes.

21 Cart at Leeds to day—Got shaft up & ready for off 11 o'clock

night.

22 Mill running but slack of work.

Putting window shuts<sup>2</sup> up in little Parlour.

24 Sharp & Frosty nothing like Spring—Leveling the Garden & making it ready for sowing. Mill standing this afternoon for want of work. Fixing Window shuts up in the house. Had Jno Wood and Wm. Spence here to night in order to Assess me for Windows³ tho' not finish'd; entered for Seven hopes it will stand so.

25 Leveling Garden—Very slack of Work in Scrib<sup>g</sup> Mill; we

have 4 Billies standing the whole of the day. Cloth Mill very

throng.

26 We feel very comfortable in our new house. Mr Humphrey Preach'd this fornoon from 89th Psalm & 15th Verse.

<sup>&</sup>lt;sup>1</sup> See p. 45. <sup>2</sup> Shutters. <sup>3</sup> The Window Tax, abolished in 1851.

27 Painter painting. Leading earth into Garden & cleaning

up about the house.

28 Cart at Leeds to-day. I was not there on account of the Rainy Morning—Joiners putting Wash board on Stair Case—Agreed to Night with the Agent for Marshall Leah & Co for 4000 Load of Coals in a Year for one Year at 4<sup>d</sup> per L<sup>d</sup> from Bierly Staith to be well Riddled. What Coals we Lead from their Pitts at Woodhouse hill is to be as low in price as any of their neighbours; we say 3<sup>d</sup> p<sup>r</sup> Load to which he neither agreed nor disagreed.

29 We have this day finish'd all our Coals up at the Mill [so]

that we shall have a new beginning.

30 Unpleasant Weather. Setting a few Pease & Cabbages in Garden. Had three Gardeners here this afternoon.

May I Dull cold Morning—Next to no Grass to be seen yet—

Mill pretty fair for work this week.

3 The Spring is very late scarce any mention of Spring Grass to see except in very forward land.

4 Mill standing this afternoon for want of Work.

5 Cart at Leeds—Mill standing this afternoon. Money as scarce as ever I saw it; never saw one Clothier to give me one Shilling.

6 Mill standing for want of work.

- 7 Dull cold morning, no right growing weather yet—M<sup>r</sup> & Miss Clough along with M<sup>r</sup> Barruh & M<sup>rs</sup> Wilkinson from Leeds at Tea.
- 8 At the Low Moor Foundry to day along with  $M^{\rm r}$  Clough, London; got home to dinner at 2 o'clock.

Mill standing this afternoon.

II Coupling Box in Scribg Mill Broke at Noon; Mill standing in the afternoon in Consequence of it.

12 Mill Running —Cart at Leeds. The Morley Local Militia

going to Pontefract this Morning.

13 News in Leeds this Morning that M<sup>r</sup> Percival, Prime Minister, was shot as he was going out of the Parliament house. Turn'd the Horses only into Mill close—At a Sale of Josh Hagues at M<sup>r</sup> Spinks.

Rather pleasant growing day. Mill pretty well for Work this

Week.

16 Squaring flags for causeway on front door.

18 Masons facing flaggs. Mill standing the whole of the day.

19 At Leeds to day: Dined with Mr Bischoffs to day.

20 At Armley hill top this afternoon. A pretty fair stock of

work in our Mill. Potatoes 20/ Pr Ld.

21 Turned our Cows into Mill Close. Pasture little in it—Chas. [Lord's] Cow not in—This is on the whole a very late unpleasant Spring. Trade slack—Money scarce & Corn dear. Jno Mather the present overseer of the poor.

A Sale of Furniture at Calverley Hall, was there. Bot a

winter hedge<sup>1</sup> for 5/6, things went off very dear.

<sup>&</sup>lt;sup>1</sup> Otherwise a clothes horse.

23 Pretty well for Work in our Mill. Cart at Leeds to day.

Walk'd down to Leeds this afternoon to prepare a few things ready for going a soldiering.

26 Fine Growing showry Morn. Cart at Leeds—had a good Load

of Wool home.

27 Preparing & packing my Cloths for Pontefract, sent Trunk down to Leeds—Turned Horses & Beasts into Mill Close. Chas. Lord only turned [his] in to-day. Our 2 Beasts has been in 6 Days but only 2 Nights sooner than his has. Pretty good Pasture. Mill standing for want of Oil, have pretty fair for Wool. Sent my trunk to Leeds for Pontefract—Sent a parcel for Mr Elvedge, Bridlington Quay.

28 Fine growing Morn—Got our Feast day in Bramley Fall along with Mrs Waddington & several other ladies & Gents—got

home by ½ fore 10 at Night—Pleasant day.

29 Set off this morning for Pontefract on Permanent Duty, I hope for the last time in my life—set off at ½ past 6 in the Morning.¹ Arriv'd here near 12 Oclock after a pleasant Ride—Delivering the

Men their Clothing. Rainy afternoon—No parade.

30<sup>th</sup> Fine pleasant still Morning—Did not go to the Field till 8 O'clock got back by 10—many of the Men missing. Dinner to day at half past 4 at the Starr. Practice the Men with swing step & Salutings. Fast how to spend our time—Rec<sup>d</sup> my Commission to day to be Lieutenant in the first Regiment—Met with Mr Long, Birkin, [who] w<sup>d</sup> have me to go to his house to Night in a Chaise, did so, arr<sup>d</sup> there about 11 O'clock did not get to bed till one.

31<sup>st</sup> Growing Day with showers & Thunder—went as far in the forenoon as the seat of Sir Jn<sup>o</sup> Ramsdens,<sup>2</sup> the family from home, saw nothing very particular tho' went over the house got to dinner by 3, set of for Pontefract at 8; they set me as far as Ferry Bridge on horse back, walk'd the rest of the way and arrived at Ponte[fract]

a little after 9 O'clock—got to bed by II O'clock.

June I Orders to go to the Field at 8 O'clock—but too Rainy & unpleasant; hopes it will be better in the afternoon as I am tired of this Idle life. Drilling the men after it was fair in the street till 3 O'clock in their Manual Exercise. Dine at 4 O'clock at New Ele-

phant—Got to bed by II O'clock.

2 Got up at 7—went to the Field at 8, men gone  $\frac{1}{2}$  an hour before. Fine pleasant morn—Got from the Field a little after 12 O'clock, had to get our breakfast when we came back. Rec<sup>d</sup> a Letter from home—Drilling men in manual & Platoon. Playing at Cricket in the Park with the Major & several more of the Officers. Came to dinner at Red Lion at 5 O'clock. Begun to Rain at the Evening parade when the men had just got on, Adjutant order'd to dismiss them. Stop'd drinking our wine till after 10—part of the Officers got as much as they c<sup>d</sup> carry, got to bed by  $\frac{1}{2}$  past 10.

¹ The Diary was left at home (and the thermometer), for from this point until June 2nd (inclusive) it is written up on one loose sheet. There may have been another sheet, now lost, for there is nothing further until June 13th, when having returned home, he resumed his notes in the book.

<sup>&</sup>lt;sup>2</sup> Byram Hall.

13 Brother Ino came for me to Pontefract—Brot my wife along with him—we were throng taking in the Arms & Accourrements at the Black Moor's Head—hard day of it; got off from Pontefract by ½ past 3 and arrived at home by ½ past 7—had a pleasant Ride.

14 Fine pleasant still Morning. Sunday morning that is this morning. Thackray and Carlisle Mill, Pudsey, was burnt down.¹

15 Mill pretty throng.

Cart at Leeds to-day. Trade looks dull & flatt. 16

Got a New Carrying Cart complete to day. Mending Boiler.

19 Gardeners here to-day. Went to look at some Grass of Josh Hainorth's at the Hugh Side.<sup>2</sup> 'Tis s<sup>d</sup> the Orders in Council are taken off.3

20 Gardeners here to-day. Mill standing this afternoon for

want of work. Heavy crops of Grass in general.

- 22 Bot some Clover of Jonas Turner for £31—it is rather short of 4 acres—we have only the first Crop. Five Men from Low Moor putting hand Rail up. Gardeners here—4 Billies standing this afternoon.
- 23 Cart at Leeds to-day. Dine with Mr Bischoff to day. Carts full of Wool—there has been good Market.

24 The men from Low Moor finished the hand Rail in 2 Days.

25 At Leeds to-day for drawbacks. Sowing before the house with white clover. Saw part [hay] mown near Leeds, bad weather for the purpose. Run all Night last Night in Cloth Mill.

26 Roads bad—Making Books up for Pay day.

27 At Leeds to-day. Cart there—Running all last Night in

<sup>1</sup> The paragraph in which the Leeds Mercury, on June 20th, described the fire, gives a useful summary of the contents of a fulling and scribbling mill

exactly similar to Rogerson's, but probably about twice the size:

'Last Sunday morning at half past four o'clock the Woollen Mill, called Gibraltar Mill, the property of Mess<sup>rs</sup> Thackray & Carlisle, situated

near Pudsey, was discovered to be on fire.....

By this casualty about 80 workpeople are thrown out of employment, and ten Stocks, nine Billies, nine Carding Machines and eleven Slubbing [? Scribbling] Machines, beside a quantity of other machinery, and the wood-work of the Steam Engine, are totally destroyed, together with about 60 Pieces of Woollens and Wool for about 150 Cloths, involving a loss at from 6 to £7,000. Of this amount £5,000 was insured in the Sun Fire Office."

<sup>2</sup> The Hugh or Hough End and Hough Top.

<sup>3</sup> It was momentous news that Rogerson noted so briefly and the effect of it is to be seen in his report of a record market for cloth a week later. Leeds Mercury for June 20th overflowed with the news about the promised suspension of the Orders in Council—a two-column report of the debate in the House on M<sup>r</sup> Brougham's motion on June 16th, an equally long report of the Minutes of Evidence before the House given by local merchants and manufacturers against the Orders, and a jubilant leader that began—"It is

with unfeigned joy that we congratulate our readers on the most beneficial VICTORY which has been achieved during the present War—a victory over what may justly be considered as the most dangerous enemy the

country ever had to contend with—THE ORDERS IN COUNCIL.'

But alas! the repeal came too late. America had already declared war, though the news did not come through for more than a month. See August 2nd.

Cloth Mill. Mill very full of work but it is rather low work—about  $10^d$  Pr Wartern. 'Tis said by the Clothiers that there has been more Cloth sold to day than ever they saw sold in Leeds Cloth Hall in one day in their lives. The kind of Goods sold are Drabs chiefly about 6/ down to 4/ Pr Yd.

29 Mill very full of work but it is rather low work.

30 Cart at Leeds to-day—Very wet evening—I see in my road to Leeds several people has begun to mow: Heavy Load of Wool home & left another at Leeds—Got a Bow & 2 Arrows made a present of from Selby—belonging to a Guinea Chief that was killed in Africa; they were brot over in a slave Ship.

July I Dull cold & Rainy—Roads bad.

2 Cart at Leeds to day—Mill throng.

3 Dull & rather cool—Masons walling near Kitchin door.

4 Masons flagging kitchin doorstones—Felling some Scotch firs out of the plantation in Broad lane for Rails; the first fruits in the wood way of Bramley Common.<sup>1</sup>

5 Wrote a letter to Rob<sup>t</sup> Coupland—On the 3<sup>rd</sup> I received

some Lobsters from Bridlington.

6 Masons finish my house this day. Joiners finish to-day.

7 Fine pleasant hay Day—Cart at Leeds. Good Market. 8 Pay Day at W<sup>m</sup> Spences rather a good one.

9 Mowing Clover for Mill on Coal hill—mowing before my house. St Helen's Mill taken to-day by C. & E. Robinson, Clothiers, Bramley.

10 Leeds Fair to-day.

II Wild day but fine hay Day—Rec<sup>d</sup> a Letter from Broth<sup>r</sup> In<sup>o</sup> from London.

13 The new Tennants take possession of Mr Pollards Scribbling

Mill at New Laiths.2

14 Cart at Leeds—Not so good a Market as there has been.

Very fine Morning—Mill very throng.

16 Begun to lead our Clover off Coal hill. Rain at 12 o'clock which caus'd us to quit over.

7 Finish'd leading our hay for Mill.

18 On the 14<sup>th</sup> Barbara Greenaway came to our house. Finish'd stacking our hay—We have earn'd more money in our Mill this week than we ever did before, in all, including Cloth Mill and drawback, £98 14s. od. Wages was £32.

19 Heavy Rain in the Night. Bramley feast.

20 Five or 6 Pieces of Cannon going on the Road this Morning, mov'd by 8 horses, each at full trot. I think this is one of the Rainyest afternoons ever seen, kept all the Company within doors. very dull.

21 Cart at Leeds to day.

- <sup>1</sup> He appears to mean that those young trees, used for railings, were the first thinnings of a plantation made after the enclosure of the Common in 1799.
- <sup>2</sup> Now Newlay, on the Aire. The lane leading down from White Cote to the mill and the bridge, built by M<sup>r</sup> Pollard, is now known as Pollard-lane.

- 22 Dull heavy Rainy day. Very bad hay weather—Mill very full of work. Our men not all [back] to their work yet.
  - 24 Dull still Rainy Morn—Sent a letter to Mrs Elvedge.

Bad hay weather. Mill throng.

- 27 Chas. Lord & I looking our Books over—he has compar'd (and it is right) my Day Book & our Note Book from the 13<sup>th</sup> August 1810 to July 1812—he is very particular more than I ever saw him before. He is also adding up each & every leaf side to see what has been earn'd from the 13<sup>th</sup> August 1810 to the last July Pay Day. Hay that is out is in very bad Condition. Plenty of Work in Mill.
- 28 Cart at Leeds to-day. To Night about 7 o'clock Chas. Lord & me finish'd our accots looking over which he finds to be rightall is settled between him & me only there remains what he owes our people which he may settle with them; his Millwright work is not pd for. I pd him the Balance for Hainorth Coals & for Clapham Coals; we also settled for all coals we have had to our own houses; also I pd him for his own Coals from Adwalton.

Aug. I Finish'd mending Boiler at 9 O'clock this Morning-

Plenty of Work in our Mill.

<sup>2</sup> The Conference<sup>1</sup> at Leeds to[day]; never saw more people go on this road for [it] yesterday & to day in my life. War is declar'd against this Country by the Americans—Trade is flatter in consequence of it.

4 Cart at Leeds very poor market.

5 Mrs Long at our house. Measuring the Plaster Work in my house—Wheat is from 67/- to 70/- Pr Load<sup>2</sup>—this is a distressing time for poor people.

6 Weather is very cold—there is a good deal of hay to get yet

& part to cut.

- Our Mill begins to be rather slack of Work. Gardener here to-day setting Brockla. Miss C. Dunn, Driffield, at our house— Our man lett Jacb Bennet his house & land to day for £40 Pr Year, Lease to be for 21 Years—fair Rent for it.
  - Dull cold & rainy—Let the Boiler of.
  - Dull still Rainy Morn—Filling the Boiler. IO

11 Cart at Leeds. Wheat £3 15s. Pr Ld.
12 Fine pleasant Morn—Only 5 Billies going; one of our men broke his Collar Bone. The Commissioners of the Highways

setting two stoops opposite my house by way of a Barr.

Walk'd to Bradford this Morning to Breakfast to look at a Horse, he was sold; got back by 10 o'clock then walked down to Leeds to buy him of the person who bot him & found him just sold again: very ill disappointed.

15 Mill throng. Got one of Mr Thackray Slubbers to one of our Billies—Bot some stones at half Mile Quarry for to set the

Boiler with.

- 1 'Last Monday the Annual Conference of the Methodists was opened in this town '-Leeds Mercury, Aug. 1st.
  - <sup>2</sup> A load of wheat was three bushels.

Bot a mare of Josha Burton for £26.

18 Cart at Leeds to-day. Corn rather lower'd to-day. Something like a Mob of Old Women in Leeds Corn Market to day owing to a person wanting £4 Pr Load for Wheat and wd take no less, so that he outstood his Market and was the last on the ground—they took his corn & spread it on the floor.

19 Mill very well for work—News at Leeds that there is peace

with America.

21 Mill pretty throng. At Clekheaton to day, fine pleasant country, got pretty well wet in Gomersal—Corn looks well but late—there is 60 Solders quarter'd in Heaton, being near Rawfolds Mill.<sup>1</sup> Reported to-day that Joseph Bonaparte & his whole Army is taken in Spain by Lord Wellington.<sup>2</sup>

Wild day—Shearers going down to-day throng.

- A Gotunburg Mail has arriv'd with the pleasing News of the defeat of the French by the Russians, the French have lost in killed & wounded 22,000.
- 24 Masons came to hew stones for Gatestead—At Horsforth feast in the afternoon very fine—Mill standing this afternoon men at feasts. Begun to lead stones for setting the Boiler; Mill is rather slack of work.
- 25 Cart at Leeds—Anxious to hear what News from America whether Peace or War. Only 4 Sacks of Corn in Leeds Market to day.

Fine pleasant Morning—Mill standg this afternoon.
Throng digging place for Boiler—2 Carts leading stone from half Mile quarries.

28 Work begins to grow scarcer in the Mill—Saw corn cut in

Neighbourhood of Rodley.

- 29 Finish'd digging to-day for the Boiler—Bad Market to-day at Leeds.
- 31 Got all ready digg'd & earth lead away for Boiler setting. Sept. I Cart at Leeds to day. Recd a letter from Jno dated Sledmere. Very poor Market—No monies.

Went to the Fall to measure some stones for Bro. Jno.

Masons begun this morning to set the Boiler.

Cart at home lead g Bricks for Boiler.

At Armley feast to-day—Got Boiler on to [its] seat to Night.

Dull still warm day—Work rather scarce.

A little Wheat cut on Swinnow.

- Cutting wheat on Coal hill & [a] trifle in some other places. Father took the Intacks of Mr Faber for me to-day at £29 Pr Year— They were in the Tenure of Jas. Varley at £20 Pr Year, but he let them of to Jon<sup>n</sup> Turner & Jos<sup>h</sup> Musgrave.
- <sup>1</sup> The attack on Rawfolds Mill on the night of April 11 was the disturbance mentioned in the Diary on April 15th. It has become the outstanding event in the Luddite riots, by being described in the pages of *Shirley*.
- <sup>2</sup> Full details of the victory at Salamanca on July 22 had just reached the country. The *Mercury* on Aug. 22nd published, in addition to four columns of despatches, a 'Chart of the Seat of War in Spain,' an early attempt at a war-map built up from the compositor's type and rules.

8 Cart at Leeds to-day, Only a poor market for Cloth-Reported to day that Bonaparte is kill'd in Russia.

Mill standg this afternoon, pulling flues in Mill Chimney

down.

Wild Morning & cloudy—Closing flues in at Boiler. IO

People beginning to shear pretty Briskly. II

Pretty well for work in Mill.

- Fine pleasant harvest day. We begun to shear Oats to day & Wheat.
- 15 Cart at Leeds to day good load of Wool home. Got my Portrait taken at Leeds. Saw Mr Lamplugh from Bridlington Quay at Leeds.

16 Turn our Mill horses into Stanningley Close this Night.

Rainy Morning—At Leeds to day for Drawback. 17 Very fine Harvest day—Mending dryhouse to day. 18

People throng in their harvest—Mill throng—Lead wheat. IQ

Very fine & still—People throng in their harvest. 21

At Leeds to day—Flatt Market. Corn lower'd 25/- Pr Ld-22 Got my Portrait home to day; [they] say it is a very good likeness.

Running in the Mill till 8 o'clock at Night. Lighting with Scribblers.

24 Rather cool but fair—At Wortley this afternoon.

26 We have mended our dryhouse but shall be oblig'd to pull it down as we find it will not answer.

A great deal of Corn uncut yet—Wild Night.

28 Very rainy all the Morning—Waters much out—Chas. Lord

gone to order a new Cylinder for our dryhouse.

Cart at Leeds-One Stuart Wortley offering himself as a Candidate for the County of York<sup>1</sup>; he spoke in the Cloth Hall Yard, got no applause at all, all was dumb.

Oct. I Great deal of Corn out in this neighbourhood—Plenty of work in our Mill—Lighting every Night with Scribblers—Money

very scarce.

Our people got all wheat off Swinnow Close.

Rode to Leeds this morning.

Wibsey fair—Chas. Lord begun to mend our Stocks—We took our Cattle out of Mill Close-Great deal of corn got in to-day.

Cart at Leeds to-day—Lord Milton at Leeds to-day; he was received by the Clothiers &c. rather cool.

Very fine Morning—Gardeners to-day.

- 78 The friends of Mr Lasscells canvassing in Bramley. IO
- Rec<sup>d</sup> a hide from Jn<sup>o</sup> Duckett 45½ lb. at 2/I P<sup>r</sup> lb. Set of from home<sup>2</sup> to go into Nott<sup>sre</sup>—had meant to have got of by 10 o'clock but on account of the heavy Rain which hap-
- <sup>1</sup> The other candidates are named below. Stuart Wortley retired, and Viscount Milton and Henry Lascelles were returned by shew of hands at York.
- <sup>2</sup> During his absence from home, the diary, without the weather records, was written up for three days on a sheet of letter paper. This has become frayed and dirty on the edges and a few words are missing or are illegible. The sheet is not filled and the account of the journey is incomplete.

pen'd did not get of till one in the afternoon; then set off but had not gone far before it begun again felt it going thro' both my Coats & so put up my horse  $\frac{1}{2}$  an hour till it was fair; then got to Osset by 4 in the afternoon where I found all friends very comfortable over a good glass of ale; in the evening went to a dissenting Chapel heard what they term a very fluent grand speaker but to give my opinion had he read his own sermon in print he  $w^d$  have been asham'd to own it was his.

12 Set of from Mr Hepworths by 8 o'clock in the Morning misty morning, for Osset where Mr Hepworth Junr set me; after a pleasant Ride got to Barnsley II o'clock, was the Fair; put up at the Star a poor house but I was a stranger; got off about 12 in order to go to Sheffield—pleasant looks-out all the way, very good buildings & fine romantic Country; got to Sheffield by ½ past two, stopped there till four. I forgot to say that before I just came to Sheffield I could not see it for smoke. At 4 o'clock got my horse out & mounted for Chesterfield—still finds it a pleasant Country full of woods & trees tho' it seems all the way to be rather later land for there is a good deal of Corn of all sorts out; a little before dark got to Chesterfield race ground & by seven got seat'd before a fire and my horse taken care of in a publick house, the Sign as yet I do not know; what made me find it was the word Wine in large letters, of course I tho't it a respectable place; but by the bye I would like to be a little more convivial than what I am at present—got to a hard bed by 9 & rose .... in the morning.

13 By 7 o'clock. Went to see Mr Allinson [he] was from home; took a walk round the Church to have a fair look at its crooked spire, came back & went to Mr Cloughton, Druggist & offer'd him Logwood at 18 Guineas Pr Ton, delivd at Gainsbro'—he did not do any business but took down our firm's name, offer'd me good Copperas at £6 Pr Ton ....; came back & got my breakfast of Coffee & left on horsback for Mansfield little Fair 9 o'clock—dull Morning but turned out very fine. Came on with two of the Coaches as far as Mansfield—there is so many handy pubs all the Way from Chesterfield. There is some very pleasant Rides where the land is good and some parts unpleasant and the land bad—my mare carries me very well but I go very slow but for all that her back begins to be rather sore: got to Mansfield by 12 Oclock, put up at the Queens Head, a very clean respectable looking house as ever I was in, got my horse put up and a single glass of Ale & then went to look for Mr Corbett; he had just gone out, shall go again if he does not come to me here before I have got my dinner which I have order'd.

<sup>18</sup> Got home out of Nottsre found Mrs Coupland & Mrs..... at our house—rainy Day.

<sup>19</sup> Tempestuous day—Mill pretty fair for work. Pulling dryhouse down—A Great deal of Corn out in some parts.

<sup>20</sup> Rainy Morn—at Leeds along with Mr Coupland—Markets flatt.

21 Throng in my Books for Mill pay Day. Very fine day a

deal of Corn got to day.

Got boiler completed ready for running. Throng in the dryhouse getting forewards fast with the flues-Mill pretty full of work.

Wild rainy Morning—Roads bad—Got one flue cover'd in

in the dryhouse by 7 o'clock in the Morning.

24 Filling our boiler with water that was last set. Putting Dryhouse Chimney up.

At Mr Tricket's Chapel in the morning—Rainy Day.

Got dryhouse agoing again to day but the door not up-Writing Notes out the whole of the day.

Very Rainy Day—Cart at Leeds to-day.

Finish day. Got dry house door stead up. 28

Took horses out of our Closes this morning—they have been in 48 times. Covering Boiler in.

Plastering Boiler Top-Stop.d the Engine to day at Noon

in order to examine the Valves; she runs very poorly.1

Nov. I At Armley this afternoon dining along with Mr & Mrs Coupland. Very Rainy Night. Great deal of corn out yet.

Got our Engine off this morning.

Cart at Leeds to-day a very flatt Market for Cloth. 3

Our Pay Day to day; we took about £500 at Wm Spences.

Fine pleasant Morning—Went with Mr & Mrs Coupland on horsback to Leeds to take the Coach for Burlington; set off for York at 8 o'clock in the Morning.

6 Father going this afternoon to solicit Mr Faber for his Sub-

- scription for a New Organ in Bramley Chapel.
  7 At Mr Spinks, Kirkstall Bridge, supping on a Goose—got home by 12 o'clock at Night; Night fine & frosty—While there Ab<sup>m</sup> Musgrave came in with subscriptions for the New Organ; this being the first day of application he had got as much as £107 on the List which is rather surprising when we consider what few goes to the Chapel in those days while the Methodist place is crowded with hearers.
- At Chapel this Morning a sermon preach'd for the benefit of the General Infirmary at Leeds—At Pudsey Chapel this afternoon (being no service in ours) heard a very good sermon.

Leeds fair to day. Went along with Abm Musgrave this

Morning to beg for our Intended Organ.

10 At Leeds to day. Fine pleasant still day. Leeds very throng.

Not very throng in our Mill.

Chas. Lord & I examining our books over; all is right as

far as we go.

Mill rather slack of work—Chas. Lord at Leeds buying Wood for altering our Willie. Roads excessive bad owing to the rains.

<sup>&</sup>lt;sup>1</sup> The daily weather records of barometer, thermometer and wind direction cease at the end of October.

15 At Bramley Chapel this morning heard a Sermon out of the 32 nd Psalm 1 & 2 Verses.

17 Dull heavy rainy day—Cart at Leeds to day.

18 At Leeds this afternoon buying pots for Chimneys gave 20/3 for 9 of them.

Fine sharp day—Pretty well for Work in the Mill.

- 20 Mr Humphreys at my fathers to Night talking on the best plan of establishing a School on the Madras System at Bramley. Rec<sup>d</sup> a letter from father Dated Hull.
- 21 At Leeds this morning—Very poor Markets Corn rather lowers—Bo<sup>t</sup> 2 Rabbits gave 2/1 for them.

24 At Leeds to-day Cart there Markets slack.

25 Preparing to alter our Willie.

27 Our people sowing wheat on Swinnow.

28 Mill pretty throng. Put our Potts on to our Chimneys.

29 At the Chapel in the afternoon.

30 Mill slack of work—Not lighting with Billies this week.

Dec. I Money scarce at Leeds to-day—Cart at Leeds pretty good load of Wool home—Uncle John Briggs died to-day.

2 Rode to Leeds this afternoon to get a suit of Black made—Waggon there for whale oil—Burying Mrs Waddington to-day.

B Dull Misty day—My birth day.

5 Mill only slack of work.

6 At Armley Chapel both ends of the day; their New Organ open'd to-day by M<sup>r</sup> White of Leeds; in the afternoon there was a Collection made for the Bible Society when M<sup>r</sup> Fawcett preach'd an impressive sermon from the last verse in the last Psalm; the Collection made was about £6 18s.

7 Barbara Greenaway very ill yesterday she had 9 leaches on her Mouth, sent this Morning for Dr Stables, Horsforth—News this Morning says Bonaparte is fast retreating out of Russia. Lord Wellington in Spain is retreating before the French, the French

having near 100,000 men & 200 Pieces of Cannon.

Monday. At 10 Minutes before 8 o'clock this Evening my wife got her bed of a Daughter; fast to know what name to call it by.

8 At Leeds to-day—A good Load of Wool home.

9 Seeking a Slubber to-day the one I have had 4 Years is leaving me.

12 One of my oldest Slubbers left me to Night.

14 At Armley this evening at a Bride visit of Wm. Barkers, Bramley—got home by 2 in the Morning.

15 At Leeds to-day—Very sharp & frosty—Cart there

16 Got Notice to day that another of our Slubbers is going to leave but not before I wanted him.

17 Mr Johnson from Grimthorp came here.

18 Ground cover'd thick with snow.

19 Mr Johnson left to day but only got as far as Armley hill top.

22 Cart at Leeds to-day—heavy load of Wool home.

23 At Leeds for Draw back—Sister Hannah got married to Jas. Hudson at the old Church by M<sup>r</sup> Busby—Having a heavy load of Wool home last Night our man came on by Kirkstall & left two sheets at M<sup>r</sup> Spinks<sup>1</sup>; on going for them next morning found one of them stolen, it belonged to Wm. Dickinson, Value £38; we got hand bills printed offering 15 Guineas reward—we have no hope of finding it.

Dull with slight frost—in the house the whole of the day.

26 Down at Leeds; thinks we have got a slight information of the Wool—cannot find it.

27 Got our Child named Mary Hannah—My wife & me got our tea at my fathers.

28 Heard of some Wool being found in the Middle of the Road nr Yeadon went as far as there this afternoon—think it is it.

Went this morning along with Wm. Dickinson to Yeadon got there before people got out of their beds finds it to be about 10 stone of what we have lost gave the men two Guineas for taking it up then set of towards Otley over Yeadon Moor where it was fit to take our faces off call'd at all houses on the road side for information heard nothing off it till we saw some small pieces of Wool blown on some Winns & found the place as we supposed where the other had been turn'd on the road without sheet rode a little further & heard of it at the Public house top of Spen Lane got it down to Leeds & all of it home to our Mill at Night—we call it a good fight.<sup>2</sup>

30 Very wild Morn all snow gone—got our new willie nearly

complete.

31 Got willie off to day it does very well—Plenty of work in the Mill.

the Hill.		s.	d.
Money earn'd in Scribg Mill from Jan. 1st 18	812		
to Jan. 18t 1813	2836	,,	,,
In Cloth Mill	319	14	,,
Drawbacks	91	,,	"
	£3246	14	,,
Wages from Jan. 1st 1812 to Jan. 1st 1813 I Years Expenses at £14 Pr Week	730	,,	,,
	£1910		
Income one Year 1812	3246	•	,,
Outgo clearing all	1910	,,	,,
Clear profit for 1812	£1336	14	,,

<sup>1</sup> At the Star Inn on Kirkstall Bridge.

<sup>&</sup>lt;sup>2</sup> Whilst some stops have been supplied in the narrative on the 23rd, the continuation of the story on the 29th has been printed as written.

Jan. I Fine pleasant Morning—Our people sowing wheat at

Stanningley Close—Very well for work in our Mill.

3 Hudson made his appearance at Bramley Chapel in the afternoon. Mr Humphrey preach'd from 90 Psalm & 12 Verse.

4 Bride visit at my fathers.

5 Cart at Leeds to day plenty of Wool but no Money.

9 Chas. Lord & I have settled for all the Cloth viz. T. Marshall, Wm Gott, B. Whitaker & every other Cloth—Also for all Pasturage if one knows when one has settled for it, also all Manure which is most devilishly too dear but shall take a fresh plan for settling the form of selling the Manure in future. Coals this time has never been mention'd. I believe C. L. supposes the stones I got for my gate stead at home is pd for; if the Manure be recon'd at £21 it only leaves £3 for his Cow Jist2 for 12 Weeks if we take it as he says— £21 is a great shame for the Manure & Stones—the 4 Guineas for the fogg<sup>3</sup> is not yet settled for—these are facts.

II Frosty with Snow. Our 2 horses, Jnº Backhouse & S. Arton came to the Mill to lead the remainder of the Manure which belong'd ourselves, they know it is right. Chas. Lord at the Mill

the whole of the day so he may see for his self.

- 12 Cart at Leeds—we had a Waggon Load (our own team) of wool home—Cart Load and had part to send by the Carriers.
- 13 Snowy Morning—I was in Pudsey this Morning seeking Money found none. Mill throng—Heavy Snow.
- 16 Jno goes to London—14 Men hung at York for Rioting ni Huddersfield.4
- 17 Went in the Coach as far as Ferry bridge to meet Brother Jno, he goes forward to London. I took the mare & went as far as Mr Longs; set of from there at 3 o'clock & got home by  $\frac{1}{2}$  past 7 o'clock.

18 Very sharp frost—Benj. Gomersall nailing Cards on to first carder on left hand on the steps in Garret belonging Bradley.

19 Cart at Leeds to day. Good load of Wool home.

- Dull frosty Morning—Seeking in money but with no success.
- Rec<sup>d</sup> a letter from Jn<sup>o</sup> from London. Got Carder finished. Mill throng. It is sd out of an Army Bonaparte took to
- <sup>1</sup> This and the previous remark have reference to the recent marriage of
- his sister to Jas. Hudson. <sup>3</sup> The aftermath. <sup>2</sup> Agistment, pasturage.
- <sup>4</sup> Rogerson's bald summary of the news of the day marks the closing act in the tragedy of the Luddite Riots. A Special Commission of judges had been sitting at York for the trial of sixty or more prisoners. Three Huddersfield cloth-dressers had been tried on January 6th and found guilty of the murder of Mr. Wm. Horsfall, of Marsden, and were executed on January 8th. The other outstanding trial was that of the men, mostly from Huddersfield, charged with being concerned in the attack on Mr. Cartwright's mill at Rawfolds. Five of them were found guilty and three acquitted. They, with others convicted of stealing arms or other capital offences, made up the total of fourteen who were hanged on Tuesday, January 12th. The trials were reported at great length in the Leeds papers on January 9th, 16th, and 23rd.

Russia of 350,000 men only himself & 20,000 will arrive in France again.

Cart & two horses at Leeds to-day for Wool (Saturday). 23

Dull still frosty Morning. Mill throng.

Cart at Leeds very good Markets for Cloth—Jno arrived at Leeds from London. Bot 12 lb. of Red paint for New Carrying Cart. Roads good owing to the frost.

Fine still & frosty. Therm<sup>r</sup> at 20°.

30 Cart at Leeds to-day—brot 7 Cloths of wet Blue Wool home.

Feb. 2 Cart at Leeds—good load of Wool home Mill throng.

Rode to Leeds to day to appeal off for an overlooker did not get off.

4 Got new large Carrying Cart. Pulling cards off small Scrib-

bler in low floor.

Card Nailer Nailing Cards on little Scribbler. Very fine droughty day—Got Cards on Scribbler. 6

Begun to ditch &c. for the first time in my Pasture besides house. Grinding Scribbler to day. Not much work this week in Scribbling Mill.

Cart at Leeds to-day—Pretty well loaded with Wool.

Not lighting with Billies this week. IO

II

Fine pleasant day—Cloth Mill very throng. Took a ride as far as Wike to tell Sellars,<sup>1</sup> Card Maker to come & nail us a Scribler on Wednesday.

Wet wild day—Cloth mill very throng. Plowing & hedging

in my Closes.

Taking Cards off hind end of far fine scribler. Cart at Leeds. Market has been pretty good.

17 Sellars nailing cards on Scribbler—Got his meals at our

house.

Chas. Lord & I have been talking over our Pay Days; he says at the present we are on a level in regard to having the Pay Days as we had the first & pd for the first at Wm. Spences; it is his due to have this but he had rather have his in July, to which we agree; we have had in all 17 Pay days up to now—viz. 2 at Oddie's, 7 at our house & 4 at Charles' & 4 at Wm. Spences, one of Spences we pd out of our own Pocket.

Very wet and Wild to Night at 7 o'clock—Billies not lighting this week tho' we are well for Wool; Cloth Mill so throng that they

scarce know whose to take first.

Sellars got Scribbler Nailed by Dark; he had Breakfast dinner & Tea at my house nothing at Cha's. Finish'd plowing my close—

20 Wild but fine. For the First time since we had a mill we have recd 12/ for Mill wastes having sold it for that this next week; she is paying a Week before hand & is taking this week on trial we

<sup>1</sup> Thos. Sellers & Sons, Cardmakers, Wyke, par. Birstal—Baines' Directory, 1822. The firm also supplied cards for Gott's Mill at Armley, in 1807, and the name has occurred previously in the Diary.

mean to have 15/ Pr Week for it—Got our little Mary Hannah Inoculated with the Cow Pox.

23 Our Cows has been in Mill Close either 3 or 4 Day in the day time only.

[On a separate slip attached to the next page.]

Recd from Chas. Lord & Davd Lord for the convenience of Chas. Lord from the 8<sup>th</sup> of Oct<sup>r</sup> 1811 to the 22<sup>nd</sup> of Oct<sup>r</sup> 1812 1302 L<sup>d</sup> of Coals at 1/- P<sup>r</sup> L<sup>d</sup> which is 1½<sup>d</sup> P<sup>r</sup> L<sup>d</sup> more than they cost me at Rooley Staith & which has been £5 8s. 6d. out again own Pockets for which we have recd no kind of remuneration,

Hainorth's offer'd to lead them for 6d Pr Ld from Syke.

Coals from S. Booths at  $4\frac{1}{2}$ d.<sup>1</sup>

Finish'd writing my Notes out; 98 Notes of what we consider good customers or good Chaps—Tho' Tuesday not at Leeds to-day.

I have been looking over our Notes & I find we are working

for about 55 Customers—Mill throng.

Wild & Rainy Day—Got all our Notes deliver'd out. Mar. I Cloth Mill throng—Scribbling Mill not so throng.
2 Dull still Rainy Morning—Cart at Leeds to-day.

3 Our Mill Pay Day at Wm. Spences on our own account; it was a pretty good one it cost about £9 which I paid at my house.

Chas. Lord and us begun to put our Accounts together. I was at Leeds this afternoon, left Chas. and son in the Books.

6 Chas. Lord & us got completely settled & pd in my Books— Coals was never mentioned. I had to pay Rooley Staith & him at Rodley.

Very Wild weather—Cloth Mill very throng.

9 Still & dull—the first still Morn I think we have had this 6 weeks—Cart at Leeds to day—Sent in my Commission as Lieut<sup>t</sup> in the Leeds local Militia. Din'd with M<sup>r</sup> Bischoff.

Fast Day—very Cold.

Frosty with Snow-Laying the foundations for a New Turnpike house opposite my house.<sup>2</sup> Pull'd Cards off large Scribbler next [the] Door in low place to-day, begun at 2 o'clock.

13 Cloth Mill very throng but not so in Scribbling Mill—Mrs Milner along with Fanny Wing arrived safe at our house to Night

about 9 o'clock.

15 Mrs Milner at my house at her Tea—my Uncle Akeroyd also—spent a pleasant Evening.

- <sup>1</sup> This memorandum inserted on a blank page interrupts the entries made on Feb. 23rd. It provides a further illustration of the small grievances on financial matters that Rogerson felt against his partner. The sum of £5 8s. 6d., which he considers he is out of pocket over the transaction, is equivalent to a penny a load, and not  $1\frac{1}{2}d$ ; but the  $\frac{1}{2}d$  has clearly been inserted after the sentence was written.
- <sup>2</sup> There are frequent references to this new Turnpike Bar or Chain up to the end of the year. At first it was placed at the top of Bramley, i.e., at the junction of Town-street and Broad-lane, opposite Rogerson's house; then it was moved to a point near Broad-lane end, about Swinnow, but it was brought back again to the first site.

Cart at Leeds to-day—Machine is ready for Nailing.

Mr Milner at Tea at my house. 17

Mrs Milner and my Uncle Akeroyd & father dine at my 19

house to day.

- At Leeds this Morning—Called on Mrs Simpson of Bridlington Quay who is at Leeds with her Daughter under Dr Hey's1 hands.
- Preparing for going to Bridlington I intend setting off in the Morning—Chas. Lord for the first time paid the Mill Wages out of his own Pocket last Night.2
- April 6 Arriv'd at Leeds from Bridlington, at Leeds by 3 o'clock.
- 8 Mrs Milner and Fanny Wing leaves my Fathers for Bridlington—Jno goes with them as far as York. Nailing Carder top of Garret stairs—Mill rather slack of Work.
- 9 Very fine day, as a proof of the fineness of the Season there is a Bird's nest back of my garden wall with several Eggs in it-I measure the Turnpike house for the Masons—Flagging, Walling
- & Plastering comes to £17 8s.

  10 Extremely fine Weather. Got the Carder off³ this afternoon.

  11 At Chapel this Morning; Sit for the first time in our new seat which was the Singers seat.
- 12 Very fine day—Mill rather slack of work. An uncommon

deal of Grass for the time of the Year.

- 13 At Leeds to-day. Very warm & fine more like Midsummer than April. Bo<sup>t</sup> some Hollies for Garden Edge<sup>4</sup> gave 5/s Pr Hundred.
- Very fine & like summer—Grass before my Door in Close almost fit to drive a Swaithe in—Finished setting Hollies in Garden Edge.
  - Very fine clear Spring Morning—Easter Sunday. 17 Fine day—Holiday at our Mill this Afternoon. 18
  - Very fine day Cart at Leeds; Mill pretty well for work. Very fine still Morning—Painters to Day.

20

Very cold for the time of the Year. 23

Rainy Cold unpleasant day—Mill throng. 26

- 27 Cart at Leeds: good load of Wool home—Got summons'd on the Grand Jury at Leeds on 3 May next—Flour good 72s. Pr
- May 3 On the Grand Jury to day at the Moot Hall Leeds got done by 3 o'clock; one of the Jurymen named Young got fined 20/- for being 35 Minutes to late.

4 Very Rainy Morning—At Leeds to-day.

- Taking Bass's off Connecting Rod & putting new ones on.
- <sup>1</sup> William Hey, F.R.S., born 1736, was Senior Surgeon of the Leeds Infirmary for many years, 1767–1812, and was the first of a line of distinguished Surgeons at Leeds.
  - <sup>2</sup> The Diary was not written up during his visit to Bridlington.
  - <sup>3</sup> The carder was started again after the cards had been renewed.
  - <sup>5</sup> Possibly the word intended was 'Brasses.' 4 Hedge.

10 Very Growing [day]—Cart at Leeds.

13 Very Growing showers of Rain—Turn'd our Cows into Mill

Pasture—Chas. Lord mending Gates.

15 Mill throng—Jnº Turner cutting the cellar drain for the intended Public house opposite me. Jesse Myers enters Jas.

Nappy's house as Publican to day.

16 Last Sunday the 8<sup>th</sup> Ins<sup>t</sup> a fracas took place in our Chapel respecting the ownering of a Seat back of the top door between Jos<sup>h</sup> Arundale & M<sup>r</sup> Jas. Binn's Brother; Arundal at the time when M<sup>r</sup> Humphreys the parson was in the Pulpit, endeavoured to throw Binns over the seat; the Churchwarden Wm. Farrer & the Constable Jonas Turner was forced to interfere.

18 Mill throng—Chas. Lord & Jn<sup>o</sup> Walker mending our Stocks.

19 Plenty of Grass in the Fields.

23 At Armley this afternoon. Rainy Evening. 24 Very Wild & wet day. Mill very throng.

25 Cart at Leeds rather wet.

- 26 Rode down to Selby in the Gig this afternoon got in about 11 o'clock.
- Took a walk round Selby Church 'fore Breakfast went then as far as  $M^r$  Cloughs, at about 11 o'clock went along with  $Jn^o$  to get married; got dinner at  $M^r$  C. and set of about 6 in the afternoon for Leeds; all got Supper at  $M^r$  Spinks and then got to Bramley about 12 at night.

28 Very fine day—Aunt Backhouse died to day.

- 30 Fine clear Morning—At Beeston this afternoon at Aunt's Burial.
  - June I Fine day—at Leeds to-day.

Fine but rather dull—Gardener here to day. Fine pleasant day—Willier broke his finger.

5 Mill full of Work: we were never paying so much wage in our Mill before. Putting 4 Bolts to hold Ashlar Wall down in Engine house. Rising our Milling to 5/ Pr Cloth and Dying to 1/6 Pr Cloth; it took place the first of June—Wedging Crank Pin on.

8 Rather cool. At Leeds to-day.

II Very warm—Mill rather slackens of Work.

July 17 Neglected to write my memorand<sup>m</sup> very much<sup>1</sup> having been so throng in our Mill & having our hay down which we bo<sup>t</sup> of M<sup>r</sup> Walker Pudsey for £29.

18 Sunday—Bramley Feast. Fine day & deal of Company in.

Mary Hannah Christen'd to day in my own house by Mr Humphreys—Getting our hay in to day.

A pretty good trade now particularly for Coarse goods.

Our men not got to their work yet—Corn late.

24 Mill begins to be full of Work—M<sup>r</sup> Johnson from Grimthorp over at Bramley.

<sup>1</sup> The last entry was on June 13.

Mr Johnson Dining at our house.

27 Fine day—At Leeds: Markets for Middle goods very flat for coarse goods rather Brisk.

29 Very warm day—Ther. at 74°. Mowing Mill Close—Pd Mr Walker for the Clover £29 exact.

31 Getting our trifle of hay out of Mill Close.

Aug. I No service this forenoon being the first Sunday in the month.

2 Hay nearly all got in—Corn scarce all got shot out yet pretty well for Work in our Mill. The Revd Basil Wood from London Preach'd at our chapel from 9 Chap<sup>r</sup> Acts & 16 Verse for the Benefit of the Missionary Society; the Collection was in the whole about £18.

3 At Leeds to-day—Rainy evening.

Father & I set off for Doncaster Fair. Slept at Wragby

all Night.

5 Fine Morning sett for Doncaster got there by 8 o'clock got breakfast at the George Inn & went into the Wool Market-Wool went slowly off but at high prices did not buy any; sett off for Selby by the way of Thorne. Father at the same time sett for Nottingsh<sup>r</sup>; got well wet in the afternoon stopt at Rawcliffe Bridge a little while & set of got to Selby about 9 o'clock. Very good roads all the way.

Very Rainy Morning which caus'd me to stop at Selby the whole of the day; went to look at some Oak wood for which they

ask me 3/6 Pr Foot.

7 Sett of this Morning for home got here by 2 o'clock after a pleasant Ride.

Fine day at Chapel this forenoon.

Mill throng—Chas. Lord & I settling our Books. The Coals we each of us have had to our houses have yet never been mention'd neither last pay Day nor this. His Millwright work I have p<sup>d</sup> in full I think his Charge is very unreasonable—he stands indebted to me a trifle which stands over till next pay Day—This day the people who have taken the Barr house opposite my house begun to stop Bramley People's Carts &c.

To Fine Morn—Cart got Stop'd for Toll at the Barr top of Bram-

ley; did not pay.

II Fine & Warm—Mill throng.

12 Chas. Lord came this day at Noon to pull Cards off Sugden Carder but did not begin to pull till after Drinking<sup>1</sup> but doing odd

I have had Joiners at my house Jobbing and putting a Cupboard in Kitchen those 5 or 6 days past—Got Cards off and part

turn'd up.

Sunderland & Slubber pull'd Cards off & turn'd all up there was only 4 Workers 3 Strippers Swift & Doffer to strip and the Geer to change. No Brasses to mend. Sellars begun at 10 o'clock got all nail'd by 5 o'clock, got 3 meals at my house nothing at Chas. Lords.

<sup>1 &#</sup>x27;Drinking' was the afternoon meal.

14 Sunday fine Day—Mrs Beecroft goes to York for the Organ, set off this Evening—Ino Whaite shd have gone gratis as he promis'd but when the time came he was so mean as to refuse going without being pd for it.

15 Mill very throng. Corn late very—Got a Summons for going

thro' the Toll bar Opposite my Gate & not paying.

Cart at Leeds to day—The Organ got to Bramley to day. Saw first Corn cut Yesterday at Kirkstall; it was Oats.

19 My father & several others out of Bramley appear'd to answer their Summons before Justice Stocks at Bradford; the Justices seem'd to know very little of the matter so they nearly came as they went, however no money was pd they have to appear again.

Paid my Subscription last Night for the Organ to Ab<sup>m</sup> Musgrave I gave £5 5s. towards it. Mr Boston begins for good to Build the

Organ in the Chapel—Mill full of Work.

20 I sett off for Doncaster this Morning on some business belonging Brother Jno in the Stone way. Did not get my business finish'd till 12 o'clock sett of home at I o'clock came & got Dinner at Pontefract & arriv'd at home by 8 in the Evening.

Jas. Hudson Christened their little one to day.

My wife & Mary along with father sett off for Grimthorp & Bridlington in the Gig. Recd a letter from Mrs Marshall Grimthorp desiring my wife's Company.

24 Mill standing we are mending our Engine—we have plenty

of work—Cart at Leeds to-day.

25 Very fine harvest morning—Rising Engine Beam—it had got sadly too low. A Meeting held at the School respecting the

Turnpike Chain—only 5 or 8 Persons there.

26 Mill throng working to day. Saw people leading Oats the first I have seen led in this neighbourhood—This year Jas. Magerrison is standing Overseer, this is his first year, Richd Whaite Churchwarden. My father & Josh Wood Overseers for the highways & Jonas Turner Constable—Cart Axle tree broke at Farsley to day.

27 Mr Waddington begun to mow Oats besides Mill.

Fine day—At Chapel both Ends of the day.

30 Mill throng—Harvest can scarce be said to have begun in this Neighbourhood.

31 At Leeds to-day. Wrote a Letter to Bridlington to Mrs. Sept. I Sett of to go into Nottinghamshire by ½ past 5 in the Morning to take up some Wool; got to Rufford by 7 o'clock at Night.

2 Got Mr Keyworth's Wool pack'd by noon. In the afternoon

went & bot Miss Brown's Wool for 40/- Pr Tod.

3 Begun this Morning to weigh Miss B's Wool got done by

noon. Stop'd all night.

Sett off for home by 6 o'clock this Morning came on by Wor[k]sop & Rotherham got to Armley Feast by 7 o'clock, had fine day.

5 Fine day—at Chapel this afternoon.

Mill throng—Mending Dryhouse—People in the midst of harvest.

7 Cart at Leeds—Remov'd the stoops belonging the chain nearer the lane End.

8 Our Wash Cart<sup>1</sup> went thro' the Chain; Men stop'd it ordered my man to back the mare thro'; he did so & broke the Chain or

perhaps a Rope.

o Very fine harvest day—Got Scribbler ready for Nailing by 9 o'clock—Card Nailer not com'd at 10 o'clock—Bramley people do not stick true they evade the Barr tho' [they] are as much or more interested as we—they are shabby dogs—Went as far as Benjm Gomersall to tell him to come & Nail. Call'd to see Mr Thackrays Mill, very nice one, the first Iron Roof I ever saw.

10 At Leeds to day swearing to E. Robinson's Debt. Man Nailing Scribbler—gets his meat at C. Lords. Heard the Organ

Play the first time with only 7 Stops in.

II Our people load their first corn, Wheat off Swinnow—Lad finishes Nailing Scribbler. Plenty of Work in the Mill.

At Armley in the Afternoon—rather Rainy. Wild with showers—Cart at Leeds to-day.

15 Set of this Morning to fetch my wife & little Mary from Grimthorp; stop'd a little at Stamford Bridge with some of Bro. Inos Masons who are building the Lock there—got to Mr Marshalls about 7 o'clock.

16 Stop'd at Mr M. the whole of the day; they are throng

mowing Oats all their Barley is cut.

17 Sett off for home; I rode my mare, Wife went in chaise to Barnby Moor & then took Coach for York. I met her at York where I had arrived before; took her a place for Leeds for which I gave 8/ Inside; I then set of on mare & got to Leeds before her; we got home by 9 o'clock at Night after being very much fatigu'd.

18 Got the second Scribbler from Willier off before Breakfast

to day.

19 Open'd our New Organ to day; there was a very grand Sing, the Chapel so crowded as I never saw it. Text preach'd by Mr Humphreys from 8 Chap. Romans I Verse. A Collection made for the General Infirmary at Leeds. A Mr Theaker<sup>2</sup> from Leeds Open'd the Organ.

20 Misty Morning—Our Mill Horses turn'd into Swinnow Close on Thursday the 16 Inst in the Evenings. Begun lighting to Night.

Cart at Leeds to-day—Mill throng—Market pretty good.

Dull Morning—Lighting till \(\frac{1}{2}\) past 8 o'clock.

23 In Bramley Fall taking dimensions of a Load of stones for Wilesworth.

- <sup>1</sup> This is almost the only reference in the Diary to the liquid universally employed in scouring cloth at the fulling mills. Without the modern supply of ammonia from gasworks it was necessary to use stale urine to eliminate the oil from the cloth, and every mill had some system of collecting it from the village and storing it in tanks or tubs. The liquid was known either as 'wash' or 'weeting.' The Bean Ing note-book gives a recipe for the preparation and use of the enriched concoction actually employed.
- <sup>2</sup> Mr. Theaker was a Leeds organist, and he was a candidate for the post of organist at the Parish Church in 1821, when the election lasted three days.

24 Mill uncommon throng. In Bramley Fall this afternoon.

25 Fine & pleasant. Harvest coming fast to a Close. Clipping & putting my hedge at home into trim. Chas. Lord & I took a walk as far as M<sup>r</sup> Thackray's Mill to see how they are preparing their Gass House.

26 At Chapel this Afternoon; the Organ played by Miss Clough she acts remarkably well.

27 Harvest Coming fast to a conclusion in this Neighbourhood.

28 Dull Drizzling Morn—Cart at Leeds.

29 At Armley Mills<sup>1</sup> looking at their Gass House. Also call'd at Winker Green Mill.<sup>2</sup> Their Engine dam very low I think they might Pump it all out in  $\frac{1}{2}$  an hour; a few poor fish (either Carp or Tench) that are in are really parboil'd as they  $s^d$  they wanted to kill the Fish as they got into their Valves; I beg'd some to put in our dam—Sent Byram down in the afternoon I think he has bro<sup>t</sup> a thousand which we put in our dam but wether they are Carps or Tench I am not judge to tell. I think Carp.

30 The finest weather ever seen. Water very scarce our dam never so low since we had a Mill; our scouring dam does not fill in the Night ready for morning & at Night we have only just the strength of the spring on but we are running till 9 o'clock at Night—

Mill very throng.

Oct. I The finest weather almost ever seen. Harvest scarce all got in.

Fine day—At the Chapel both ends of the day.

4 Heavy Rain the whole of the day.

5 Cart at Leeds—fine day—Mill throng—Good Markets to day.

8 Mill throng I think all Mills are in the same way.

- II I can only see one field of Corn out—Oats at Wood dale hills.
- 12 At Leeds to-day. Went to get what Information I could of M<sup>r</sup> Glover Whitesmith respecting the erecting Gass Lights.

Very Rainy Morning—Part corn out yet.
Wild but very droughty—Ice this morning.

16 We can scarce get into Mill for Wool working till 9 o'clock

at night.

- 19 Very frosty this Morning—Cart at Leeds to day. It is said Jn<sup>o</sup> Haley Staked a Millstead out in the Ling croft Yesterday.<sup>3</sup> Agreed with Wm. Spence to have the Pay Day at his house at 1/9 P<sup>r</sup> Head. Josh Holiday begun to dress Stones we have in the Yard for our Gass house.
- 20 Begun my Books for the ensuing Pay Day. Rec<sup>d</sup> a letter Yesterday from Trent side saying there was a Boat Load of Potatoes for us 400 L<sup>d</sup> to be delivered at Kirkstall Bridge at 5/6 P<sup>r</sup> Load—Mill very throng.

Went to Leeds this afternoon with a full intention of ordering Gass for our Mill to Glovers Whitesmiths; as they could not do it in no reasonable time thought proper to let it alone till next summer.

Leading Wood bot of Josh Holiday for a new Stock.

<sup>&</sup>lt;sup>1</sup> Benj. Gott & Sons. <sup>2</sup> In Armley. <sup>3</sup> The beginning of Waterloo Mill.

27 Delivering a Boat Load of Potatoes at Kirkstall Bridge at 6/6 Pr Load of 240 lb.

28 Delivering Notes out for Mill Pay Day at Wm. Spences—

also delivering the Ware Notes out.

29 Barbara Greenaway and Geo. Nicholson came to our house to day very unexpected—Got a Clock put up to day in Bramley Chapel—Got the Boat delivered of the whole of the Potatoes—Mill

very throng.

30 Had Musgraves & Co. at Pollards Mill wishing me to give over going to Leeds on Tuesdays & Saturdays with our Mill Carts; told [them] I would willingly drop going on Saturdays but not on Tuesdays; told them they were the first to begin the bad practice of going on Saturdays & they are the first to be tired of it. I was determin'd to do as much as they did for I tho<sup>t</sup> I was able to do as much as they with 2 Horses; they have 4.

31 M<sup>r</sup> White<sup>1</sup> from Leeds for the first time came to play our Organ which he did in the afternoon. M<sup>r</sup> Humphreys gave out an hymn himself from the reading desk the first time I ever saw it

done by a Church parson.

Nov. 2 Fine day—Cart at Leeds.

3 Our Pay Day at Wm. Spence's on our own Account—We took £700; we call it a pretty good one.

4 Uncommon fine day for the time.

5 Mill as throng as possible—Rec<sup>d</sup> News to day of the Defeat of Bonaparte on the Continent by the Allies with the loss [of] 65 Thousand Men.<sup>2</sup>

6 At Leeds to day—Recd 2 Oxen from Grimthorp.

8 Wild & showry Morning—Leeds fair.

9 At Leeds to-day—Reported that the Allies have taken

Bonaparte I am afraid it is without foundation.

- To Chas. Lord & us settled our Books as they stand in Cash Book in full also Jas. Hutchinsons Cloth—but the Coals was still never mentioned. Took our Mill horses in last Night—Sent for Dr Laycock to Mary Hannah she is very unwell he gave a gentle emetic.
  - II Mill throng—Got a Slubber this Morning from Pollard's Mill.

12 Stop'd Cloth Mill to day in order to repair it.

13 Fine pleasant still Morning for the time of the year—Roads bad. No Millwrights here to-day.

14 At the Chapel both ends of the Day.

- 15 Millwrights here to-day—Killing the two Oxen of M<sup>r</sup> Marshalls.
- 16 Winterly day—Both Carts at Leeds. Millwrights here only  $\frac{1}{2}$  a day—Walker & lad.

17 Millwrights, 2 came this afternoon. Snows hard.

- <sup>1</sup> Mr. John White, a noted Leeds musician and leader of the band at the principal concerts in and around the town.
- <sup>2</sup> The overthrow of Napoleon by the allies under Blucher, at Leipzig, on October 18th.

- 18 Fine Sharp Morning—4 Millwrights here to day—Last night Father, Jno and I partly settled for the first time our afairs; we are to give him £150 a year & to pay all Income & Property Tax, he also is to have all the Land—he gives over to us all the Mill & the whole of the Salting and Stapling trade; I am to have a Cow kept & Jno is to have Milk. Chas. Lord helping the Millwrights this afternoon.
- 19 Dull but a pleasant Morng—5 Millwrights at the Stocks to day-Father setts off to go into Nottinghamsh in order to pay for some Wool & to try to buy a little more.

  20 Fine & pleasant—5 Millwrights to day—The Stocks in a

woful condition nearly all rotten down they are very bad ones.

21 Fine day—At Chapel to-day.

- At Bradford to day along with Mr Pollard & Mr Clifton of Otley to meet the Commissioners of the Highways to endeavour to stop putting a Chain up at Bramley town End but could not do it; they are determin'd to have one up—however we have done our
- 23 Cart at Leeds—News came to-day in Leeds that the Dutch are throwing off the French Yoke & that their fleet is coming to England for Protection—this is rare News—I hope we shall now see better times than those we have seen for the last 20 Years.

24 Plenty of work in the Mill.

26 Fine & frosty—Wm. Nichols, Kirkstall & Jno Clough, Hough Side Overseers for the Highways—Jas. Hudson Constable. Bot a Bible at Leeds for £4 6s. Trade brisk but wool advancing. We hope to see this next 20 Years better than the last 20 Years.

28 At Chapel to-day.

Jnº Walker & lad widing [? mending] us a Stock to day.

30 Sharp weather—It is said that there never was so little Cloth in Leeds Cloth Hall before; scores of stands together without anything on them.

Dec. I An Illumination throughout the Parish of Leeds1—

Leeds I suppose was very Grand.

3 Pleasant morning—Mill throng. 4 Dull day—At Leeds to day.

5 Rainy Day—A Subscription for the General Infirmary at our Chapel. Mr White from Leeds Played the Organ he dined along with more Singers at my house; the subscription amounted to £4 is.—it would have been considerably more but for the dirty day.

7 At Leeds to day—Markets very good—Corn low & lowering. 9 Bradford fair. Jno came out of Lincolnshire.

<sup>1</sup> Public rejoicings for the recent successes against Napoleon were general during the first week in December. The Leeds Mercury (Dec. 4) described the local celebration—" Last Wednesday night we had one of the most brilliant spectacles ever exhibited in Leeds. The town was illuminated in every part in celebration of the victories obtained by this country and her allies...." The illuminations were described in detail—at the Mayor's, the White Horse, the Sessions House, Mr. Gott's, Mr. Wormald's (Denison Hall), Mr. Bischoff's (North Town End), &c. "The Fireworks were very numerous and brilliant. The night was peculiarly auspicious—the populace in high spirits, but not licentious."

13 Mill very throng—I have been inform'd this morning that some person has been so curious as to count the Number of Pieces after the Market last Saturday in the Color'd hall; there were only 750 Pieces.

14 Fine sharp frosty day—I had 2 Carts at Leeds to day for Wool.

Dull dirty Morning—Mill very throng.

Fine day—At Chapel to-day.

22 Wild dry Morning—At Leeds to day for drawbacks. Setting the Stoops for Turnpike Gate opposite my house.

24 Friday—Leeds Market to-day owing to to-morrow being Christmas day—All places about Mill full of Wool even my Counting house is full; we are very throng.

Very fine clear still day—Mr Humphrey preach'd at Bramley

Chapel in the afternoon.

26 Very fine day like Spring weather.

28 Fine & frosty the whole of the day—Cart at Leeds.
29 Very sharp frost. Very throng in our Mill—All dye pans in use every day & if we had more we cd employ them. This year taking it altogether has been a very lucky one for us (tho' it has been in the midst of Wars) & I think I may say it has been a very good one for the Country at large—Thank God for it—I am sure we have great reason to be thankful in regard to the things of this world; our property keeps increasing more & more every year-My father is 68 Years of Age this day.

Dec. 30 Very fine & very sharp—It is sd that Lord Wellington has got possession of Bayonne in France he has had great loss— Masons laying stones across the Seak Sough¹ to take the Dam water

away—Mill throng.

31 Trade brisk & Money rather more plentiful than it has been. Never had any snow this end of the Year yet-Fine frosty Moon light Night.

A Statement what our Mill has done from Jany 1st 1813 to January 1st 1814:

d. Earned in Scribbling Mill &c 3513 9 Sold Waste for 3 37 ,, Mill'd 3446 Pieces 399 Drawbacks 18 103 Total in I Year £4053 6 ,, I7 d. S. Paid for 52 Weeks Wages 1366 ,, I<sub>4</sub> For 52 Weeks Expences including everything on the Mill 900 One Year's Expences £2266 ,, I<sub>4</sub>

<sup>&</sup>lt;sup>1</sup> The channel or drain along which the waste water from scouring wool or cloth flowed to its receptacle in which the seak or sediment collected. See p. 78.

	£ 4053 2266	s. ,, 17 ,, 14	d. ,, 6 ,, 9
Clear Profit	1787	,, 2	,, 9 in 1813
I have actually rec <sup>d</sup> in Money this 1813 the Sum of — And have p <sup>d</sup> —	£ 4050 2366	,,	
which leaves a balance of in favor of the Mill besides the	£1684 ere was		f50 in Cloth

which C. L. & I settled that did not come into the Cash Book.

#### 1814.

Jany I Fine sharp still & frosty—Roads as good as in Summer. No snow. Mill (h)as full of Wool & Cloth (h)as it can hold; Making Seven days in a Week.

2 At tea at Uncle Akeroyds at Armley.

4 Leeds Market to day. I have seen Money scarcer than

to day tho' it was not plentiful.

A Meeting held this afternoon in the School at Bramley for the purpose of Establishing a Branch Bible Society in Bramley; it was attended by 3 or 4 Persons from Leeds & all the parsons in Bramley—Mr Humphreys in the Chair things went very well on.

Clear still frosty Day—Mill throng.

Rather Misty but fine & still hedges covered with a white IO Thermomr out of doors this morning at 8 o'clock at II degrees—Hands scarce and (h)as saucy (h)as Newgate I scarce can tell yet wether this good trade is to do me hurt or good owing to this reason.

Dull frosty day Ther. 21 degs—At Leeds, snowy Night.

- There is a New Drysalter setting up in Bramley; this is the 5th I have known sett up in Bramley. Making 7 Days in our Mill.
- Ground cover'd with snow. Ther. 22°. Thanksgiving day Mill running. A Meeting this day held in the Chapel for the purpose of moving the resolutions to chuse the Committee & to enter into Subscriptions for the Branch Bible Society of Bramley—we had several able speakers from Leeds; the chapel was pretty well filled about 30 persons of files. Annually entered their Names as Subscribers, it was [a] pleasant sight.

14 Ther. at 15°. Ground covered with snow. Mill throng.

Fine clear sharp still frosty Morn—Ther. 110. This is the first time I ever (since our Mill begun) could say that I was really scarce of hands. I can scarce work the Mill.

18 Dull still frosty Morn—Wind NE. Ther. 16°. Tis sd Ice in the River Air in some parts is 18 inches thick. Cart at Leeds to day—Mill throng.

Got our hands nearly completed again.

Wind NE. Ther. 28°. Ground cover'd with snow.

Ther. 20°. Wild Blustering Snowy cold afternoon from the N.—The first meeting of the Committee of Bible Society in the Chapel School Room to Night at 6 o'clock.

23 Dull windy & heavy Snow to-day—Ther. 240—All the Mails stop'd in the south—No News from London these 2 or 3

days.

Rather a fine frosty Morning. Ther. 260—Wind N.—Baines Paper mentions the Ther. to have been as low as 3° but I never saw mine so low—Mill throng—Mail Coach going up just now while I am writing II o'clock fornoon.

Dull frosty Morn—Ther. 240—Wind N.—Cart at Leeds.

Dull with Southerly Wind. Thaws but not very sharply. 26 Ther. to day at Noon 38°. Mr Clark from Walesby Nottingshr came to fathers last Night.

27 Dull still & frosty—Roads very slippery—Ther. 32°—Dining at Mr Spinks along with Bro. Jn° & Wade from Leeds. 28 Ther. 34°—but it has froze in the Night. Roads very slip-

pery.

30 Mr Busby from Leeds Preach'd at Bramley to-day—Ground

cover'd thick with snow in some places here.

31 Mill very throng—The snow in the south is very thick, the papers say from 16 to 24 Feet deep, but here in the Middle of the fields the stubble is scarce cover'd; but it is drifted in other places pretty thick but nothing to be compared to the year 1799.

Feb. I Fine clear frosty Morn—Ther. 240—All the Coaches

stop'd between Leeds & Halifax the Mail goes on Horsback.

3 Fine clear still frosty Morning—Ther. 17°—Our Dam nearly froze over—Went round our Division for the Bible Society found about 16 without Bibles part of those thot themselves as well without as with; I believe very few will take the trouble to come for them if they be given to them.

The first Meeting of the Bible Society after having been the different districts in the township to Night; we find we are in want of 200 Bibles; the Subscriptions & Donations amounted to £83 10s.

-£73 of which is annual Subscriptions.

6 Strong wind & heavy Rain but not what we call a bottom

thaw—Freezes to Night Wild & Sharp.

7 (H)as full of Wool & Cloth (h)as ever we can hold, all our places full—Thaws to Night.

8 Thaws fast—Very Windy Night. Rivers much out. I saw Ice which was left on the River Banks by the flood 18 Ins. thick.

9 Fine Morn Wind W.—Roads dirty—Agreed yesterday with Marshal Leah & Co.¹ Agent for 5 or 6000 Load of Coals at  $4\frac{1}{2}$  Pr L<sup>d</sup> to commence yesterday & to have the above in one Year.

10 Working in the Mill till 9 o'clock.

Got our Bibles from Mr Naylors; I got 14 Bibles & 3 Testaments to distribute—distributed our Bibles at the School.

<sup>&</sup>lt;sup>1</sup> Colliery owners at North Bierley, Bradford.

15 Rather frosty—At Leeds to-day. Paid Jas Magerrison in a £14 is. 6d. Bill for £10 in Lieu of a Town's Apprentice.1

Begun to day to make up my mill Books.

Running all Night last night in Cloth Mill also all Night

to Night. Painters begun in my house to day.

21 Fine & frosty—Painters painting my house to day—Mill as throng as possible—Writing my Notes out to-day got part of them out—Found my Thermometer this morning in our Gatestedd that had been stole by the Plasterers Boy who was jobbing at our house.

Fine but frosty—Cart at Leeds to-day—Had a Queen Anne's

Farthing in my hand to day at Mr Radford's Leeds.

Very frosty & still—Painters painting passage. Got all the Notes deliver'd. Money more plentiful. I have got p<sup>d</sup> of one Man so long before the pay day he owed me £132 I have seen when I shd have thought great things of it.

26 Very frosty but fine—Ther. at 22° this Morn. Cloth Mill

running all last Night.

27 Very frosty but fine—At Armley to day to see Mary Hannah; she is there weaning.

Mar. 2 Frosty day—Our pay Day for Mill at Jesse Myers it was a good one; we pay this out of our own pocket.

7 Sharp frost with slight Snow Wind NE. Jno sets off for London this Morning. Mill very throng—News to day that there is a cessation of hostilities; we are in full expectations of a peace which I once thot I shd never see in my time.

9 Chas. Lord & me settled our accots this forenoon; we did it very amicably p<sup>d</sup> the Money at my own house in full—Mill very throng. I intend setting [off] for Scarbro' in the Morning to a Sale of Madders. Agreed with Mr Tattersall Kirkstall to find me Malt at 5/8 Pr Strike for one Year from the 1st Inst.

Very snowy unpleasant Day Wind E.—Slept at Malton.

II Snowy Morn—Got to Scarbro' by II o'clock; went to sale of Madders there—Bought none, got of to go to Bridlington by ½ past 3 o'clock got there in the Evening after a very unpleasant Journey the snow being so thick 2 yds thick in many places—slept at Elredge's.

Went [to] Bridlington Market.

Set of home by way of Grimthorp slept at Mr Marshalls-Snow very thick over the Wolds.

Set of & got home to Night-Mr Coupland at our house.

Frosty day—At Leeds to-day Wind E.

Mill throng. Burying my Aunt Armitage to day at Armley 16 Chapel.

<sup>1</sup> The overseers had the power to place out poor-law children as apprentices as and where they pleased. The usual fine paid in Leeds by employers who refused to accept the alloted boy was  $\pm 10$ . The receipt, preserved by Rogerson, ran as follows:-

1814, Feby 15th. Recd of Mr Josh Rogerson the Sum of Ten pound in Lew of a Parish Aprentice. By me Jas. Marjerison, Overseer of the

Poor of Bramley.

17 Very sharp but still Wind E.—We are still lighting till 9 o'clock at Night.

Mr Coupland came to our house on his return from Manchester.

19 Misty still & frosty Wind NE.—Rec<sup>d</sup> a hide from Jn<sup>o</sup> Ducket. News Yesterday came to Leeds that Bonaparte had got defeated by Blucher I hope it is true. Gave 20/- to send to the distressed Inhabitants in Germany. Gave over lighting to Night in our Mill.

22 Dull misty dirty day—News to day that Lord Wellington has defeated Soult at Bayonne in france.

23 At Leeds for Drawback. Great talk of a Peace at Leeds.

24 We have run all nights this week in the Cloth Mill—Gardeners here to-day—never could begin to do anything in it this year before.

25 Dull still rainy Morning—We ended the Cloth Mill Number

at 3775 Pieces.

27 At Armley Chapel this afternoon. Mrs Nicholson came to

Geo. Nicholson & his mother leave here for Hull—I went as far as Leeds with them-Running all last Night in Cloth Mill.

Ap. 4 Fine still Morning—Wind W. Mill throng.

5 Very fine Spring Day—Cart at Leeds. Good Markets.

Very fine still Morning—People throng sowing.

News arrived that the Allies have entered Paris; the gate was open'd to them by the Inhabitants. Huzza—Bells ringing & Guns Firing. Jnº & I for the first time settling our Acco<sup>ts</sup>—Oatmeal 42/- Pr L<sup>d</sup> in Bramley.

8 Running all Night in Cloth Mill—Large Wheel in Scribg Mill got loose Jn<sup>o</sup> Walker came and Wedged it on.

10 Misty Morns but very fine warm days—News to day that Bonaparte had abdicated the French throne.

II Confirmation of the above<sup>1</sup>—Bells Ringing Guns Firing & Tom Paines Quaking for very fear of the terrible day of the Louis's— Turning Carder up in Middle Chamber belonging Jas Barnes— Trade good Corn low hands scarce but money not so very plentiful— London News that Bony has deliver'd himself up into the hands of the Allies-Easter Monday to-day-like as if all was mad in

Rogerson's staccato comments on the thrilling news arriving daily from Paris, rising in a crescendo and collapsing abruptly in the bathos of some trivial record of the price of wool or a repair job in the mill, express effectively the feelings of relief and thankfulness at the fall of Napoleon.

The Dispatches from Paris on April 1st were issued by the Foreign Office on April 9th, but it was not till the following Saturday (16th) that they were published by the local press. Counter Revolution in France.—Fall of Bonaparte!—Restoration of the Bourbons!—ran the head-lines in the Leeds Mercury.

In the same issue there was an advertisement of the "Commemoration of the late Glorious Events by a Grand Ball and Supper" and an official announcement-

GENERAL ILLUMINATION.

In consequence of a Requisition for several respectable Inhabitants for a General Illumination the Mayor requests Monday next may be considered as the Day appointed for that Purpose, from the Hours of Eight to Eleven o'clock in the Evening.

Leeds, April 15, 1814.

W. Greenwood, Mayor.

Bramley; Mr Woodhead going about on Horsback dress'd in Soldier's Cloths representing Gen. Blucher with a Sword in his hand & cock'd hat on his head with all the Music they could collect

Playing God save the King thro the town.

12 Fine weather. White flaggs & white Ribbons flying in all directions—Market not so good to day—Corn dull of Sale and lowering. Farmers sick—Tradesmen scarce know what to do in the way of trade not knowing which way things are to turn. Coarse Wool of the Dallow Gill<sup>1</sup> sort has been at 20/- Pr stone—Mill throng all Mills are. The very worst South Country Brich is worth £18 Ios Pr Pack in London—Grinding Cards—Jas Hudson Constable in Bramley. Took ½ a Guinea in Gold in change for a Note the first I have seen this long time they have been worth 14/-.

13 Fine and growing Weather—Hands very scarce—Nailing

Cards on—Meals at my house.

15 Fine spring day Wind E.—Now as the Wars are all over

people seems to want something to talk about.

16 Wild showery day—Clothiers all agree that there has been only a very flatt Market.

Rainy Morn—An Illumination in Leeds to Night.<sup>2</sup> 18

Markets all agree are very flatt. Mill (h)as full of Wool as it can hold & men as saucy as the Devil.

Growing Rainy Morn but very warm—Oat Meal at Leeds

on Tuesday 30/- Pr Ľd

Made a feast for all my Men at W<sup>m</sup> Hemmingways.<sup>3</sup>

Cold Day-Shaft Neck turn'd round-Mill had to stop in consequence of it.

Cold Day—Got Mill off by Noon. Call'd to see Mr Cass

<sup>1</sup> In Nidderdale, and once part of the great moorland sheep pastures of Fountains Abbey.

<sup>2</sup> Both papers the following Saturday (April 23) contained a full account of the rejoicings: "Bells were rung, flags displayed and several processions took place during the day. The one most relished by the public consisted of the workmen of Messrs. Gott and Wormald at Bean Ing, who paraded the streets with a fleece and other emblems of their manufacture after regaling plentifully on roast beef and ale, by the liberality of these gentlemen who caused an ox to be roasted whole."

"At 8 o'clock the Illumination took place and never has Leeds exhibited a more brilliant spectacle. At Burley Bar (Benjamin Gott, Esq.), Lighted with variegated glasses disposed in the form of anchors, etc. On each side transparencies of the Regent's Feathers. In front Europa trampling on a serpent and unfurling the Bourbon standard, Fame crowning her with laurel. Over which was a Crown formed by lamps. The appearance of this house at a short distance was truly magnificent.

"Messrs. Gott & Co's mill, Bean Ing, was lighted by gas, forming a Crown

& Anchor in front—which was very brilliant.'

Among other houses described were Denison Hall (H. Wormald, Esq.), "decorated with upwards of 6000 lamps," North Town End (Mr. Geo. Bischoff), Woodhouse Lane (Mr. T. Bischoff).

The Bean Ing note-book also contains a reference to the day, for on the last page is the note: "779 People enumerated for the distribution of the Ox at the Illumination, Bean Ing, April 18th, 1814."

The Golden Lion Inn, Bramley.

who is very ill—We have never had a right working week this three weeks.

Rainy Cold Day—It is s<sup>d</sup> that good Oats in France is as low as 7/6 P<sup>r</sup> Quarter. Oats here is at 23/- P<sup>r</sup> Quarter II stone Neett<sup>1</sup> 14 <sup>1bs</sup> to stone. Good Wheat 25/- P<sup>r</sup> Load—What with men Drinking Punch & women Drinking Tea we are to have no more work done in this part. We shall be in want of another Bonaparte to make them work.

28 Dull cold unpleasant Day—Wind E.—Ground very full of wet—Fencing Mill Close—Work very plentiful. Wool ill to sell at the present.

30 Fine but windy—Ground full of Wet—Roads very Dirty—

Our Overlooker & I had some disagreement.

May 3 Fine day—Trade very flatt at the present but Mill throng tho' all Mills are not so.

5 Cold dry Winds—Mill throng. Money not very plentifull.

6 Cold with Snow. Ground cover'd with it. At a Meeting of the Bible Society in the School to Night. Heard the Organ play to Night after it had been tuned by a person from Liverpool.

Went to Burial of Jno Cass of Leeds this afternoon.

10 Fine Morn but cool—Cart at Leeds.

II Gardeners to day—Setting Scotch cabbage, etc.

I2 Trade has turned very flatt tho' we have plenty of work. I believe several mills in the Neighbourhood has had to stand or nearly so. Father Poorley.

13 Very Cold Morn—Sent for Doctor Hird from Leeds to my

father.

14 Dull cold weather Wind N.—Mill throng.

16 Mills in general continue very slack particularly those who have been working Army Goods.

17 Fine day. Cart at Leeds—Markets flatt.

18 We are making 7 Days in the Mill but we begin to look thin of Wool—Hands more plentiful.

20 Father continues to be very unwell.

21 Our overlooker gone to Mirfield to look at some Machinary.

22 Mill full of work—Mr Pollard's Mill has to run with the Engine nearly the whole of the day.

24 Cold Weather Wind generally N. Cart at Leeds.

25 Father rather worse than he was a few days since. Thos. Ayrton turning the hot water from Engine on the top of Dam Banks.

At an Inquest (the first I ever was at) held at Mr Spence's Bramley on a Boy who had got kill'd by falling out of the Garret Door at Mr Pollard's Scribbling Mill and had fractured his Scull—the Boy about 8 years old belonging to one of their slubbers—Had a person clearing the weeds from among my trees at home—We are very well for work but most of the Mills very slack of work—Money scarce.

'Net.'

The Masons Dressing stones at Half mile Quarry for Dyhouse.

28 We have only very little wool by us, we are likely to make a stand of it. Making 7 days in the Mill. The Americans want to be at peace with England but I rather think they will have a good deal to do to come at it.

30 Cold droughty Weather—Father a great deal better than

what he was—Carters leading us 8 Dos Lime from Rodley.

31 Less wool in our mill than I have seen of a long time; work in general very scarce—Cart at Leeds to day—Only a very flatt Cloth Market.

June 2 Dull & very cold with slight rain; it is no way like

Summer weather it is so excessive cold, Ther. 45°.

3 At Barroby Hall to take up some wool along with Brother Jn<sup>o</sup>—M<sup>r</sup> Smith was not at home; rode on to Garforth did no business—Peace Signed between France & England.

4 Dull cold & rainy—but Water scarce in the rivers.

5 Mr Fawcett Armley Preach'd at Bramley Chapel this afternoon.

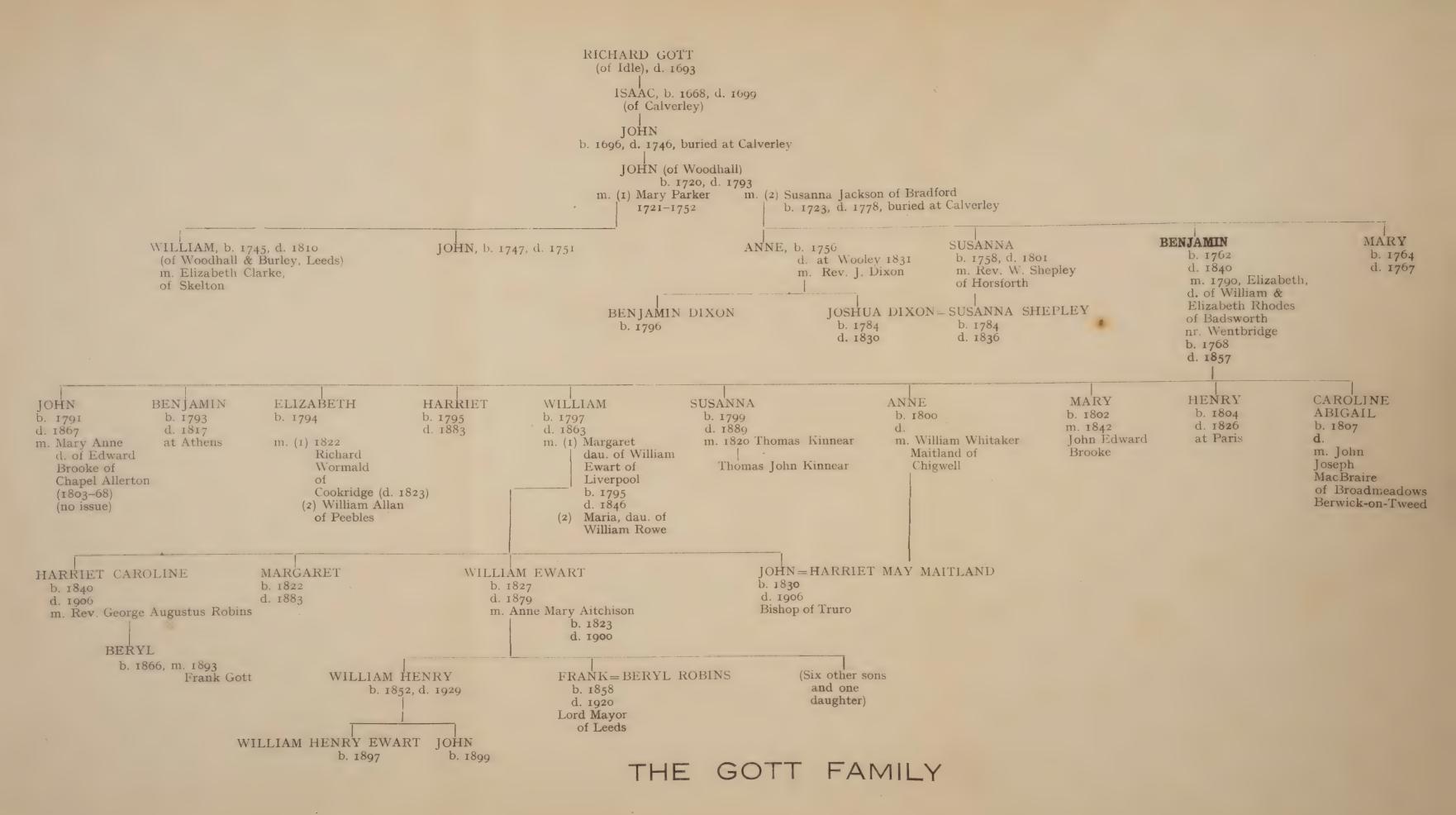
6 Dull & very cold wind Easterly—Begun to dig for our intended alteration in our Dyhouse—This peace makes all very slack—I think now as it is com'd nobody seems so very fond of it; there will be a deal of money lost in various ways. An Express has arriv'd in Leeds this Morning saying that the Hon. Heny Lasscells Member of Parliment for this County is dead—Had Mr & Mrs Dyson & two of his Daugters at our Mill from London. Ther. this Evening at 43°.

7 Dull Cold Morn—a great deal more like Winter than Summer—Only making 6 Days in our Mill something rather strange for the time of the year to us—Cart at Leeds to-day. I made a Mistake above; it was Lord Lasscells that is dead, Mr L's Brother. Mrs

Coupland came to our house to Night.

Y H R. T.

indicate fiere's Day 1780, a firm of weblier toers



# The Papers of Benjamin Gott in the Library of the University of Leeds.

By R. Offor, B.A., Ph.D., University Librarian.

On New Year's Day, 1780, a firm of woollen merchants in Leeds, trading as Wormald and Fountaine, took as an apprentice a youth of seventeen, Benjamin Gott by name, who was destined soon to play a leading part in the transformation of the woollen industry by the introduction of steam power and machinery. Five years later he became junior partner and the firm took the name of Wormald, Fountaine and Gott. The senior partner, John Wormald, was dead within a twelve-month: Joseph Fountaine survived only another five years; and by the end of 1790 the business had passed into the hands of Benjamin Gott and of John Wormald's eldest son, Harry, who was just out of his apprenticeship.

Gott seized his opportunity and made the year 1792 an epoch in the history of the firm by launching out boldly upon the manufacturing of cloth and the erection of a 'factory.' From that year the members of the firm which he controlled for nearly half a century were woollen manufacturers as well as merchants. For half the period one or more of the younger generation of Wormalds were associated with him; then after 1815 his own sons took their places. The title of the firm changed from time to time with the personnel, so that it is impossible to select any name other than that of Benjamin Gott himself to describe and include all the varied documents that relate to the activities of the firm during his reign at the head of it.

The surviving papers of the firm, very largely dating back to the time when it still went under the name of Wormald, Fountaine and Gott, were presented to the Library of the University of Leeds by Mrs. Frank Gott at various times between the years 1924 and 1929. With them Mrs. Gott gave a few printed papers and pamphlets bearing on the history of the firm. Of different interest is a box containing documents relating to the magnificent private library built up by Benjamin and his son William.

The collection as a whole is made up of three distinct classes of material. There are in it, first, a few volumes or note-books

dealing with specific subjects, each complete in its way. The second group consists of correspondence, mostly inwards, except for the long run or series of letters from Hopps. Particular value attaches to the assortment of letters that were received as the factory was being equipped from 1792 onwards. The third group, made up of miscellaneous documents and formal papers such as bills of exchange, contains, with some exceptions, little of permanent interest.

Happily the three legal documents, the apprenticeship of Benjamin Gott, his admission into partnership, and the dissolution of partnership have survived in one form or another and provide a definite basis in outline of the earlier history of the firm. Some details are supplied by one of the note-books that contains the Accounts of Copartnership. This is the most continuous document in existence relating to the firm, and in some respects the most important, for it presents the annual balance sheets of the firm without a break from 1st January, 1786, to 1st January, 1815, with the signatures of the partners, and then intermittently and unsigned to 1st January, 1839, when Benjamin Gott retired. It therefore covers exactly the whole of the period of his partnership, and yet it is only a thin paper-backed quarto exercise-book. Except for a similarly modest cash-book of the accounts for the rebuilding of Armley Mill in 1807, there are no other account books surviving.

On the technological side there are two volumes of great value. The one is a substantial foolscap book, two inches thick, that was presented by Mr. John Gott in 1928. It is a pattern book containing samples of dyed cloth and yarn with corresponding recipes or working instructions, and is clearly the work of Benjamin Gott's third son, for he has inscribed in it his name and the date—"Wm Gott, Augt 1815." He was then eighteen years of age, and the book reveals him qualifying himself in the dyehouse, no doubt under the instruction of the head dyer, and keeping a record of his work.

The other, an octavo paper-covered note-book, was presented in 1925 by the late Mr. A. B. Hunter, who prefixed to it a printed introduction and summary of its contents and bound the whole in leather. He also attributed its compilation, without any doubt on the point, to Benjamin Gott; but Mr. W. B. Crump, who has found it invaluable for his survey of the Leeds Woollen Industry, and Mr. Alexander Yewdall, of the Textile Department of the University, who has joined with him in arranging a selection of its

contents for publication, think it was begun by one of the sons during his apprenticeship. Mr. Crump has also given it the title of *Prices and Processes*, as it ranges over many of the processes of the woollen manufacture and also gives various prices, especially the piece-rates paid at Bean Ing for spinning, weaving, finishing, etc. The question of its origin and authorship is discussed in the section devoted to this note-book.

The Papers do not form a connected series; they are but the scattered survivors of what must have been a vast mass of correspondence. Moreover, they possess a most miscellaneous character. There are letters of great length reciting the multifarious details of foreign markets. At the other end of the scale we have a quantity of bills of exchange, receipts, valuations, and so forth. Notwithstanding individual features of much interest, there are gaps spreading over many years which make it impossible to construct from these papers alone anything like a comprehensive history of the firm. No letter-book survives, and thus there are but few letters from Benjamin Gott; the letters are nearly all from correspondents. Even such a series as the Hopps reports only furnishes details of the commercial side of the firm's operations during the absence from Leeds of Benjamin Gott.

The earliest dated documents are bills of exchange drawn by Richard Thompson of Leeds in 1770 and 1771. The latest are those connected with the closing history of the firm in the sixties of the nineteenth century. It has seemed best to confine this selection to the earlier activities of Benjamin Gott himself, commencing with his apprenticeship in 1780 and concluding with the dissolution of partnership in 1817, whereby the Gott family gained the sole controlling interest. This was a period of the highest importance in the development of the textile industry, and most of the noteworthy papers fall within it. The Hopps letters are, however, too lengthy to permit transcription; it has only been possible to give extracts.

There are other sources whence light is shed on the activities of the firm. The most important is the collection of Boulton and Watt MSS. in the Birmingham Public Library, for it includes many letters exchanged between Leeds and Soho, or relative to work in progress in Leeds over many years, as well as plans and drawings. Professor Heaton has explored the collection in part and contributes a note on Gott's intimacy with the firm and the visits to Leeds of James Watt, jun., in defence of their patent rights. Earlier letters

dealing with the installation of the engine at Bean Ing and the payment for it have been supplied for publication here by the courtesy of Mr. H. M. Cashmore, the Birmingham City Librarian, and they contribute in no small degree to supplement the letters in the University collection. Professor Heaton has also discovered recently a collection of letters from Benjamin Gott in the archives of the American Fur Company at New York, but these all fall beyond the period under review. The discovery shows that there may be other sources still untapped.

As for contemporary printed matter there are sundry references in the *Times*, the *Leeds Intelligencer*, and the *Leeds Mercury*. From 1800 to 1806 Parliament was taking serious notice of the growing industrial unrest; there was particular anxiety as to the well-being of England's ancient staple industry. In 1800 and again in 1806 Benjamin Gott figured, directly or indirectly, in the investigations at Westminster: the Commons' *Journals* for the former year bring him forward as an important witness; and in the latter year the great *Report from the Committee on the Woollen Manufacture* contains frequent references to his factory.

### THE MEMBERS OF THE FIRM.

BENJAMIN GOTT was born at Calverley on the 24th June, 1762. The family had been settled there from the seventeenth century, and some of the members were masons or builders. father, John Gott, following the family tradition, turned particularly to bridge building and surveying. He is stated to have been a friend of Brindley and to have distinguished himself as a Civil Engineer, using a modern name for his profession; and he took up his residence at Lower Woodhall in Calverley. The time was opportune, for from the middle of the eighteenth century roads were being reconstructed and converted into turnpikes in all directions in the West Riding, and many bridges were in consequence being widened or rebuilt. In 1752 Quarter Sessions ordered a survey of the county bridges to be made and the resulting 'Book of the Bridges,' containing the plans and elevations, still exists at the County Hall, Wakefield. It is likely that John Gott was engaged in this major survey, for he certainly was employed on the collateral survey of the non-county bridges and was joint-author of the Register of them<sup>2</sup> that is preserved with the Bridge Book. In

<sup>&</sup>lt;sup>1</sup> Taylor, Biographia Leodiensis, p. 377.

<sup>&</sup>lt;sup>2</sup> "A Map of all the Rivers in the West Riding of the County of York, with an Account of the Bridges over the same, taken by actual Survey in 1752 by J. Westerman and J. Gott."

1797 a list of the county 'Bridges that have been rebuilt and widened....for the last Forty Years' was drawn up by his eldest son, William Gott, so that father and son were engaged continuously for half a century as bridge surveyors to the West Riding.

Benjamin, the youngest son, was apprenticed to the firm of woollen merchants in Leeds. His father paid a substantial premium and signed the agreement in 1780. He died in 1793, just as his son launched out as a manufacturer at Bean Ing.

After his marriage in 1791, Benjamin Gott took up his residence in Park Lane, not far from the firm's warehouse. Hopps, in his letters, refers from time to time to Mrs. Gott's mother, Mrs. Rhodes, who lived till 1816; her father died in 1777. In 1803 Armley House, once the seat of the Hoptons, was acquired from Thomas Wolrich, and here Mrs. Rhodes lived for a time. The house¹ was subsequently rebuilt from the designs of Sir Robert Smirke, the architect of the British Museum; and within its walls Benjamin Gott assembled many artistic and literary treasures. A portion of the grounds has been preserved by the city of Leeds as 'Gott Park.'

The family of Wormald produced many well-known names. From Wardell we learn that John Wormald was councillor in 1761, alderman in 1775, and mayor in 1776; his three sons likewise held civic office. His signature is appended to the accounts of copartnership for 1785. His wife was Sarah Fountaine,<sup>2</sup> presumably a relation of his partner. He died in 1786, but the family interest was carried on by his sons, Harry, Thomas, and Richard, for whom a share in the management was explicitly reserved by the deed of co-partnership.

Harry Wormald, his eldest son, became a partner in January, 1790, just a year before the death of Fountaine. His home was at Woodhouse.<sup>3</sup> He did the Huddersfield journeys for the firm. His death on 7th June, 1816, was the occasion for the dissolution of partnership.

Thomas Wormald became a partner in 1793.<sup>4</sup> Like his brother Harry he does not figure much in the Gott correspondence, but Hopps mentions him in 1798. He died in June, 1809, and the *Accounts* of the latter year show £64,440 as due to his representatives.

<sup>2</sup> Information kindly supplied by Captain W. F. Wormald.

<sup>&</sup>lt;sup>1</sup> Inter alia see Parsons' The civil..history of Leeds, etc., vol. 2, p. 185; and Taylor, Ecclesiæ Leodienses, p. 99.

<sup>&</sup>lt;sup>3</sup> Leeds Directory, 1809.

<sup>&</sup>lt;sup>4</sup> Changes in the personnel of the firm are shown in the Accounts of Co-partnership.

The youngest brother, Richard, is a more familiar figure. He became a partner in the firm in 1795. In the 1809 *Directory* his home is in Park Lane; in 1822 in Park Terrace. Like his brothers, Richard conducted the buying from the small manufacturers of outlying districts. To the detailed statements of Hopps he occasionally adds a terse postscript in large letters about the dulness of trade and so forth. The Wormalds are stated to have been addicted to good living, and Hopps seems to have had some prejudices against them; witness his comment on the way Richard performed his duties as a volunteer. Richard married Elizabeth, daughter of Benjamin Gott, in 1823, but he died in the same year and left no child. He had gone to live at Cookridge Hall, which passed to his nephew John, the son of Harry Wormald.

Joseph Fountaine was councillor in 1766, alderman in 1775, and mayor in 1777. He was one of the three trustees of the new White Cloth Hall, which was opened in 1775. According to the Leeds Intelligencer he was married twice; in 1766 to Miss Prince of Woolley, near Wakefield (d. 1767); in 1770 to Miss Atkinson, daughter of Henry Atkinson, an alderman of the borough. He died of apoplexy on January 24th, 1791. With his death the active participation of the Fountaines in the business came to an end. They were on terms of personal friendship with the Gotts, for Miss Fountaine accompanied the latter on a visit to London in 1797. Mrs. Fountaine's death is recorded by Hopps on August 1st, 1799; he calls her a connexion of Benjamin Gott.

Miss Fountaine married the Rev. William Addison of Darlington; the match-making is the subject of a cryptic passage in French in Hopps' letter of August 25th, 1798. Addison changed his name to Addison Fountaine, the cost of the legal transactions being dealt with through Gott. On October 15th, 1800, Mr. and Mrs. Addison Fountaine sent their respectful compliments from Bath to Mr. and Mrs. Gott. The Fountaines may have retained a financial interest in the business, as Mr. W. Addison Fountaine is reported by Hopps on May 27th, 1808, as writing from Bath for 'a £300 remittance, they purposing to make an excursion.'

The warehouse of the firm was situated at Burley Bar, now part of The Headrow; 'Wormald Row' and 'Fountaine Street' in the vicinity carry on the memory of its founders, whilst 'Gott's Yard,' directly opposite King Charles Street, commemorates the third

<sup>&</sup>lt;sup>1</sup> Parson and White, Annals of Leeds, p. 177; Leeds Mercury, Jan. 25th, 1791.

partner. Owing to recent extensive improvements no trace is now to be found of the old buildings. The deed of partnership of 1785 shows that this Burley Bar property belonged to John Wormald. In 1790 there was an unsigned agreement between Josiah Jowett of London and Joseph Fountaine for the sale of the Old Hall property, Wade Lane, which was stated to be in the occupation of Messrs. Whittell and Joseph Sheepshanks and Messrs. Fountaine and Gott. The warehouse remained at Burley Bar until 'Benjamin Gott and Sons' came to an end in 1867. In the 1798 Directory Burley Bar is the address of Benjamin Gott.

Subsequent to the latter's admission as a partner in 1785 the firm became known as 'Wormald, Fountaine and Gott.' This was still its name in 1794, but by 1806 it had become 'Wormald, Gott and Wormalds.' On the retirement of Richard Wormald in 1817 it became 'Benjamin Gott and Son,' and a few years later 'Benjamin Gott and Sons.'

### THE FACTORY AT BEAN ING, 1792-94.

Of the first half-dozen years of Gott's partnership in the firm there is nothing known. But when Fountaine's death, early in 1791, raised him to the position of senior partner, Gott must soon have arrived at the momentous decision to embark upon manufacturing cloth, and to build a factory. Nothing survives to reveal the enquiries he put on foot and the plans he laid in the next few months. But on March 20th, 1792, Benjamin Gott and Harry Wormald purchased from Thomas Woodcock and the Rev. Guy Fairfax a large site on the outskirts of Leeds. It was known as Bean Ing and was mentioned by Thoresby as a pleasant meadow by the river Aire. At the time it was only approached from the town by a field-path and there was no bridge across the river.

Although nothing remains of the machinery installed in these early days at Bean Ing, the buildings themselves still exist in a comparatively untouched state, and they are a remarkable memorial of the changes that came over the woollen industry in Yorkshire a century or more ago. Park Mill, as the factory was called, is a red brick structure surrounding three courtyards; the first, or northern one, wide but of little depth; the second, to the southeast, of great size; and a third smaller one, to the south-west. The scale of the whole is impressive at the present day, and to the relatively small Leeds community of 1800 it must have represented an enterprise of unprecedented magnitude. The L.N.E.R.

Company's Goods Yard to the east is still marked on some maps as 'Gott's Yard.'

The long wing facing Wellington Street, with its central bell-turret, is of some antiquity—it is marked on the map attached to the *Directory* of 1834—but the block separating the first from the main courtyard bears manifest signs of greater age; its wooden floors and general condition suggest it may have been untouched by fire and be part of the original structure of 1793.

The machinery for power was in the lofty block on the south side of the main courtyard and not far from the river Aire. This block has undergone reconstruction, although it may be a century old. On the east of this courtyard is what was once an isolated little building which contains the offices, with a semi-circular bay that affords ready supervision over most of the other blocks. On the west is the entrance to the third yard, within which is a circular building with an iron roof which was a gasometer house, erected, not when the mill was first lighted by gas, but when, about 1830, this further mill-yard took its existing shape. The wing on the western side was built to accommodate the mules when power was applied to spinning, and the small recesses in the walls, still known as mule-gates, are an interesting relic of the period.

The whole group of buildings is well worth careful study as a striking monument of Georgian Leeds, and a detailed account of its growth is given in a later section.

Of the equipment of the factory the surviving letters tell a good deal; and on the most important feature, the Boulton and Watt steam-engine, the letters in the University Library are supplemented by many others in the Boulton and Watt Collection at Birmingham. The correspondence relating to it is spread over nearly a year and a half from the despatch of the order in August, 1792. Only in December, 1793, do we hear that the engine has been actually started, and Soho seems almost driven to despair by the doubts that at that eleventh hour appear to have assailed the Leeds firm. Can it be that the Clothiers—the Gentlemen Clothiers—are destitute of even common understanding? Incredible!"

destitute of even common understanding? Incredible!"

Business relations soon developed into friendship and the interest of the letters is enhanced by the personal matters that gradually find their way into them. The famous members of the Soho firm, John Southern, James Lawson, John Rennie, Peter Ewart, and possibly through them, George Augustus Lee, the cotton spinner

<sup>&</sup>lt;sup>1</sup> See Southern's letter, No. 50 (i).

of Manchester, were all attracted by Benjamin Gott's personality and enquiring spirit. He in turn sought their advice and counsel, as appears in later years.

Meanwhile, throughout 1793, the factory was being filled with machinery, and stocks of dyewoods and of wool were being accumulated. Disconnected and interspersed amongst the Soho correspondence come a variety of letters from different parts of England, from London merchants, from Yorkshire foundries and millwrights, from cardmakers and woolbrokers, from shippers and importers, offering or supplying all manner of things. There are vats for the dyehouse, block tin from Cornwall, a boiler from Rotherham, a stock and harness from Wiltshire, carding engines, 'machines or things called willies,' chests of indigo, casks of madder, barrels of oil soap, all to be transported to Leeds. There are even three barrels of oysters sent down from London for the delectation of the wives of the three partners (of whom two were dead), in the hopes of selling logwood to the firm.<sup>1</sup>

# COMMERCIAL TROUBLES AFTER 1795: THE LETTERS OF HOPPS.

W. Preston & Co. might well fear the consequences of the 'unboundless unprincipled ambition & plunder of the French' and 'their late horid destruction of Louis the 16<sup>th</sup>.'<sup>2</sup> Gott had no normal circumstances under which to work out his new methods. These troubles arose not only from the upheaval caused by the development of machinery, but also from the marketing troubles consequent on French efforts to strangle our trade. Commercial matters are the predominant theme of the remaining portion of the papers.

This circumstance is to some extent fortuitous, for the correspondence with Boulton and Watt about the 'pirates' at the Bowling iron-works, the law-suit with Bramah about his press, and the letters from Lee on the subject of factory design show a continued interest in methods of production. Nevertheless, the outburst of activity in 1793 gave place to an anxious period of war-time conditions, and Gott, having organized his factory, became engrossed in matters of trade rather than in processes of production. Thus it is appropriate that the letters from Hopps should now form the bulk of the correspondence. These voluminous documents commence in 1796 and finish in 1812.

<sup>&</sup>lt;sup>1</sup> See No. 17 from William Preston & Co. No. 21, January, 1793.

Hopps was in charge of the counting-house. While Gott was away he received from him reports in great detail on matters of commercial importance. The name of Hopps first appears in these papers on February 13th, 1796, as a witness to the accounts of copartnership under the form 'Jo. Hopps,' which it bears in the majority of cases. From 1797 to 1811 the signatory is, however, either J. Hopps, Josh Hopps or Joseph Hopps, but in 1813 John Hopps signs, the last year in which the name appears at all as a witness. The letters are usually signed 'J. Hopps,' and this must be John if the 'Joseph' mentioned in Letters 95, 99, 100, and 102 is the same person as the characteristic witness to the accounts. is the same person as the above-mentioned witness to the accounts of copartnership. The *Directory* of 1809 gives 'John Hopps, *Book-keeper*, Woodhouse Lane'; Charles Hopps of Park-houses was also a book-keeper; Joseph Hopps of Lowerhead Row was a shoe-maker. In the 1817 *Directory* John is described as 'gentleman, North Street,' whilst Charles is 'Cashier to B. Gott Esq. Park house.' That Charles was already associated with the business in 1808 is shown by John Hopps' letter of May 27/28 in that year. In 1822 John is 'book-keeper, North Street.' The 1830 *Directory* shows that he was then living at 11, Brunswick Place and was 'head clerk at B. Gott & Sons.' In 1834 he is 'cashier,' and another John Hopps is a book-binder in Lowerhead Row. In 1842 the book-binder and the shoe-maker are still in evidence, but the veteran cashier is no longer mentioned; he must have died at much the same time as the master he served so faithfully for half a century.

The late Mr. Hunter, whose connection with the business commenced in 1878, after the Gott control had come to an end, stated that even in his day legends were still current of the marvellous assiduity of Hopps. His letters sometimes cover three or four pages of minutely written foolscap. The writing is excellent, although the composition is occasionally disjointed. Hopps was something of a scholar, for on one occasion he makes a highly confidential communication in French. He can express himself vigorously, as witness his bitterness against those who calumniated his beloved employer about his evidence to the House of Commons in 1800<sup>2</sup> and his denunciation of the bungling and corruption of government supply departments.<sup>3</sup>

The places to which these reports are addressed give some idea of the movements of Gott. In August, 1796, he and his wife were

<sup>&</sup>lt;sup>1</sup> No. 134. <sup>2</sup> No. 98. <sup>3</sup> Nos. 126 and 135.

on holiday at Scarborough. In April, 1797, they went with Miss Fountaine to London. In November of the same year Gott was in London and Rochester. In August, 1798, he took his wife for a northern tour, visiting Carlisle, Glasgow, Edinburgh, and Newcastle. In August, 1799, he was in the south, for letters were sent to Portsmouth and London. In April and May, 1800, he was in London, when his statements before Parliament caused such a sensation. In October he and Mrs. Gott were in the south-west, visiting Wells, Plymouth, and Falmouth, and ending up in London. Later on an autumn holiday seems to have been taken at Redcar, and London was often visited. With the exception of London, the last letters of Hopps were sent in March, 1811, care of Ewart at Liverpool, and of Lee at Salford.

At these times Hopps faithfully relates domestic news. Benjamin, he was sure, would make a good scholar; John was poorly; William was asleep; the little ladies were staying with their grandmamma at Armley—they looked charmingly; and so forth.

The number and character of the orders is Hopps' main theme. There were customers in all parts of Great Britain as far as Thurso and Kirkwall, but the great struggle was in overseas markets. At this time Portugal was still closely bound by trade links to this country in pursuance of the Methuen treaty at the beginning of the eighteenth century. Although Portugal itself was of small size, her vast dependency, Brazil, provided a great market; 'there is no port scarce open but it for Cloth,' wrote Rogerson in 1808 (see p. 81). The number of Portuguese firms and the variety of their demands are significant. But in 1796 the French terror was already beginning to loom large on the Portuguese horizon; and, when the country was devastated in the Peninsular War, an important market was temporarily lost. James Ellis, who bought 'Portugal, Spanish & Saxony wool,' told the parliamentary committee of 1806¹ that almost all the workmen in one particular factory at Armley were discharged at a time when Portugal was likely to be invaded by the French.

Ireland was another extensive market, whence the firm's traveller, Mr. Starforth, dispatched frequent reports. In his evidence before the House of Lords, ordered to be printed May 1st, 1800, Gott claimed special knowledge of the Irish trade covering 20 years or more.<sup>2</sup> But again political circumstances were adverse. The

<sup>&</sup>lt;sup>1</sup> Report, p. 65.

<sup>&</sup>lt;sup>2</sup> An Account of the proceedings, etc., London, W. Phillips, 1800, pp. 137-142.

rebellion of 1798 involved the country in wide-spread disaster, and business was at a standstill.1 The later reports are always pessimistic; customers had become poverty-stricken and were unable to meet their liabilities.

The German trade was practically strangled by the fall of Hamburg in 1806<sup>2</sup>; the Russian market was unsatisfactory<sup>3</sup>—the alleged shrinkage of the cloth supplied to the Russian army rests on unsound evidence4; and the one great market left was that of the United States, where also disaster ensued.

### INDUSTRIAL TROUBLES, 1799-1802.

Whilst mechanical improvements were multiplying supply many times and reducing cost, demand on the contrary suffered severe restriction, and thus the industrial situation in Yorkshire involved grave problems. There were loud complaints from the artisans, who suffered from unemployment, reduction of wages and a great increase in prices. Riots ensued with loss of life and property.

It was under these circumstances that Benjamin Gott attained the highest civic office. He was already a councillor in 1791, and became Mayor in 1799. A local volunteer corps had been formed in 1794; and of the Leeds Volunteers organized in 1798 Gott and the Wormalds were members, Gott becoming Captain Commandant.<sup>5</sup> At this time we learn from Hopps that there was some endeavour to do 'mischief at the new works,' which had to be carefully watched.6

Next year there is another reference to the new mill, and R. Wormald adds a note and calls it Kirkstall Mill.<sup>7</sup> There is more detail about the works at Kirkstall in 1800,8 so that the firm was evidently on the point of starting a branch there. It has been difficult to trace such a mill at Kirkstall itself, and the reasons for identifying it with Burley mill are given elsewhere.9 Actually the first reference to it under that name is the appearance of the 'Burley Mill Stock' in the Accounts of Copartnership for 1802. Almost simultaneously Gott commenced operations at the much better known Armley Mill, half a mile lower down the river Aire. But just when the new works were in progress disaster overtook the Bean Ing mill. On August 10th, 1799, Wormald stated

No. 89, 13 June, 1798.
 No. 115, 11 December, 1806.
 No. 124, 2 October, 1807.
 Parliamentary Report of 1806, p. 374.

<sup>&</sup>lt;sup>5</sup> Leeds Intelligencer, August 18th, 1798; Parson and White, p. 189.

<sup>&</sup>lt;sup>6</sup> No. 90, 22 August, 1798. <sup>7</sup> No. 95, 10 August, 1799.

<sup>&</sup>lt;sup>8</sup> See Atkinson's letter copied in full in No. 99. <sup>9</sup> See p. 269.

that everything appeared 'to be going on tolerable at B. Ing,' but on the following day, Sunday, the mill was destroyed by fire. The damage amounted to £13,942, of which £11,946 was covered by insurance. The mill was speedily rebuilt.

The year 1800 brought Gott before the notice of leading statesmen. The clause in the Act of Union with Ireland removing the duty on raw wool exported to that country drew strong opposition from the woollen manufacturers of England, who feared that their market would suffer from a consequent expansion of Irish industry; old antipathies died hard.

On April 29th Gott appeared before the House of Commons in support of the petitions that had poured in against the removal of this duty. These petitions aroused the wrath of those who took a wider view and who were already denouncing monopoly and tariff discrimination. "He¹ considered the opposition of a few wooldealers and wool-combers as of very little consequence. These men had too long enjoyed an exclusive monopoly by virtue of Acts of Parliament that ought never to have been passed and which were a disgrace to our Statute Books." The government refused to withdraw the obnoxious clause. Later in life, changed circumstances made Gott, too, a strong opponent of a tariff of this description.

In the course of his evidence Gott made some sensational statements as to the effect of machinery in reducing the demand for labour.<sup>3</sup> He was careful to add that he was speaking from hearsay, but he was misrepresented in the journals of the House and in the newspapers as having given these statements from his personal knowledge of the facts. He was again summoned before the House and underwent 'an ingenious examination by the Chancellor of the Exchequer.'<sup>4</sup> A good deal of feeling was generated, and demands were made that he should be summoned to appear a third time. Pitt explained away the situation in a not over-complimentary passage, but William Wilberforce signed a complete exoneration of Gott, with which Pitt warmly concurred. The angry feelings aroused are attested by Hopps' comments on these 'fools Knaves Sots.'<sup>5</sup>

The whole year was a troubled one, and the high price of provisions caused a serious riot in the Leeds market,<sup>5</sup> whilst Gott

<sup>&</sup>lt;sup>1</sup> The Marquis of Lansdowne in the House of Lords. The Times, May 1.

<sup>&</sup>lt;sup>2</sup> Evidence before the House of Lords in 1828, Bischoff II, 189.

<sup>&</sup>lt;sup>3</sup> See Wilberforce's draft letter, No. 65.

<sup>&</sup>lt;sup>4</sup> Times, May 1. <sup>5</sup> No. 98, 5 May, 1800.

was giving his evidence in London. The Leeds *Directory* for 1800 states that the armed association numbered about fifty, with Benjamin Gott in command.

### THE STRIKE OF 1802 AND THE ENQUIRY OF 1806.

In 1802 the discontent of the journeymen croppers, arising from the breaking down of the apprenticeship system, brought them into open conflict with Gott. When the latter attempted to take on two apprentices who were above the customary age, all his 'finishers' ceased work. An attempt to have his cloth finished in sundry other Leeds establishments was frustrated, for the overlookers of these places reported that all their hands would leave if this were done. Despite the laws against combinations, the 'Institution' of these cloth-finishers, dressers, or croppers, as they were alternatively called, was as highly organized in some ways as a modern trade union. No man could get work without exhibiting his 'ticket' of membership, and strike pay was admittedly given to Gott's men. The Leeds merchants who intervened in the dispute were obliged

The Leeds merchants who intervened in the dispute were obliged to make concessions to the cloth-dressers; some of the small manufacturers were themselves of the same class and resented the increasing power of the big mill-owners. The upshot was the "Agreement between the Merchants and Cloth-dressers" made at the Rotation Office, January 19th, 1803. The second clause ran as follows: "That the Merchants and Cloth-dressers engage not to take and bind any apprentice or apprentices above the age of 15 years, nor for a less term than 7 years."

The legislature itself ardently embraced the doctrine of laisser faire in its application to the existing situation. In 1806 a committee of the House of Commons conducted a lengthy enquiry into the effects of machinery and of combinations. As a result the new forces triumphed, not only because of class predominance, but because far-sighted men realized that the old restrictions were an anachronism and that it was fatuous to attempt to check the progress of invention. 'The right to employ his capital as he likes is the birthright of every Briton'; thus was the lofty phraseology of the Puritan politicians adapted to mercenary interests. It was not seen till later that this zeal for the removal of old barriers needed to be tempered with discretion, in view of the severity of the blow to the old hand-workers who had suffered so much.

Strangely enough, as it seems now, those whose enlightenment

1 H. of Com. Inl., 1806, p. 696.

enabled them to see the hopelessness of opposing mechanica progress were yet concerned to defend the domestic system of manufacture, which was itself ultimately doomed to extinction by the concurrent development of large-scale production. There was a natural desire to keep the textile industry in the homes of a multitude of small manufacturers scattered over a wide area, rather than to herd the workers together in ill-lit and ill-ventilated factories. More attention had been paid to machines which cheapened production than to details of planning which ameliorated the lot of factory workers, although Gott's humanitarian instincts are shown in his efforts to secure good light and ventilation as well as in his provision for the sick.

In any case the domestic system in the woollen industry more or less flourished until half way through the nineteenth century. Benjamin Gott never dreamed of doing wholly without it: although he was a zealous promoter of the factory system which was to be its supplanter. James Graham, a member of the 1806 Committee, and with an intimate knowledge of conditions in the Leeds area, thought the two systems could foster each other. "If the factory system were to exclude the domestic system it would be dreadful indeed, for it is very pleasing in Yorkshire to see the domestic Clothiers living in a field, with their homestead, rather than shut up in a street."2 John Atkinson, a witness before the same Committee, who had worked first in a factory, then for a 'domestic manufacturer, then again in a factory, said the regulations were 'very irregular' in the latter; 'men might leave their work and go to drinking'; there was 'no going to alehouses at Bramley as from Mr Gott's.'3 William Cookson thought the domestic system beneficial in that it spread the population over the country. He would have restricted the number of looms in each establishment.4

<sup>&</sup>lt;sup>1</sup> James Graham, upon whom a baronetcy was conferred in 1808, represented Carlisle in Parliament, but was closely associated with Leeds, for his wife was the heiress of more than one family in this district. He had a residence at Kirkstall and was agent for the Earl of Cardigan's estates. Gott bought the Pasture Hills estate from Graham at the same time as he purchased Armley House in 1803. Graham's evidence shows that he had an intimate knowledge of Gott's enterprise, and his explicit reference to the latter's use of steam in the dye house and his improvements in dyeing are valuable in default of other sources of information. Besides erecting houses with small holdings for the use of clothiers Graham also "built a manufactory and let it to a great manufacturer."

Report, p. 445. 3 Ibid., p. 121.

<sup>&</sup>lt;sup>4</sup> Parliamentary Papers, Report on Woollen Manufacturers' Petition, 24tb April, 1804.

Few saw that the concentration of the processes of industry under the control of a single master-mind would win the day. Yet the sagacious but unsentimental Arthur Young had already drawn an opposite conclusion to that of his contemporaries. drew attention to the waste in marketing entailed by the dispersal of industry over a wide area. "That evils are found in the present system," he wrote of his 1793 visit to Leeds, "I should suspect by Mr. Benjamin Gott building houses, &c., like a town, in order to bring the fabric close, instead of spreading over the country."1

William Child of Wortley had to confess that hands could not be retained by the smaller masters at times when "Mr Gott's Factory has been going day and night for days and nights together."2

But whatever the point of view, in none of the references in the 1806 Report to the strike of 1802 is Benjamin Gott referred to with disrespect. William Cookson thought that the apprenticeship laws should be enforced and that the lower classes were worse off than of old. Yet although he had known hands turned off when work was dull, he says: "I believe it is not so in general with Mr Gott."3 The latter's field of operations had vastly increased. He is the 'principal Factory Master in Yorkshire.'4 "The master clothiers at Pudsey have not lost their journeymen by their going to work at Gott's....I have sold more cloth to Mr Gott than any other man I ever sold to in my life."5 Joshua Dixon, Gott's nephew, was able to say in 1808: "the country makers will only work for our house,"6 a remarkable testimony to the firm's reputa-

Despite the friction in the labour world, industry and trade continued to expand, and with this went a material improvement in social conditions. "I can remember the time when there were not seven carriages kept in Leeds and now I daresay there are a hundred," said Mr. James Graham.7

Thus the firm's expansion proceeded apace, and, although Armley Mill was destroyed by fire on November 20th, 1805, it was rebuilt at a cost of £23,508.

A personal triumph occurred in 1806, when the Prince of Wales, afterwards George IV, and the Duke of Clarence, afterwards William IV, came to Yorkshire. The latter visited the works

Annals of Agriculture, vol. 27, p. 311.

<sup>&</sup>lt;sup>2</sup> 1806 Report, p. 115. 4 Ibid., p. 234.

<sup>&</sup>lt;sup>3</sup> *Ibid.*, p. 71.

<sup>&</sup>lt;sup>5</sup> Ibid., p. 48. Joseph Coope, of Pudsey.

<sup>&</sup>lt;sup>6</sup> No. 133, 26 May, 1808.

<sup>7</sup> Report, p. 445.

of Wormald, Gott and Wormalds, but the former was prevented from doing so by what was publicly announced as a 'temporary indisposition,' the real reason being stated in the letter quoted by Hopps,<sup>2</sup> "that the smell of the different things used in dyeing &c. is apt to make him unwell."

## THE CRISIS IN THE AMERICAN TRADE.

Commercial difficulties were now reaching a climax. The Portuguese and the German markets were for the moment crippled. Perhaps the most interesting of all the Hopps letters are those which contain the copies of letters from American customers about the increasing tension between Great Britain and the United States. Napoleon's Berlin and Milan Decrees of 1806 and 1807 respectively, which sought to shut out British goods from the continent, brought in retaliation our Orders in Council of 1807. All these placed severe restrictions upon neutral commerce, of which America had the lion's share. The American government declared an embargo on British goods, which was afterwards modified, but was finally replaced by the Non-Intercourse Act. This technically applied both to France and to Great Britain, but, owing to the maritime impotence of the former, it actually only hit British interests. The democratic party in power in America affected Francophile sentiments, and it was dominated by the agricultural interests of the southern and western states.

Commercial New England saw the clash from a very different stand-point: its prosperity was largely bound up with British trade. The Boston merchants feared ruin if a rupture occurred, and expressed themselves very frankly about the aims of the warparty in Congress. "If our Government see cause of war with England, the people do not," wrote Lyman of Boston<sup>3</sup>; Hopps quotes more than one angry criticism of this sort. In fact, when the war of 1812 had broken out, the Orders in Council having been rescinded too late, and indifferent success had attended the American arms, discontent in New England culminated in open threats of secession from the Union.

The extent of the firm's trade with America may be gathered from Hopps' letters. Many of the blankets worn by the red men who roamed the western plains were supplied by Gott.<sup>4</sup> Thus it is not surprising to find that the embittered character of the relations

<sup>1</sup> Leeds Intelligencer, Oct. 6th, 1806.

<sup>&</sup>lt;sup>2</sup> No. 107.

<sup>&</sup>lt;sup>3</sup> No. 137, 31 May, 1808.

<sup>4</sup> Ibid.

between the two governments not only affected New England traders. On this side of the Atlantic, merchant and miller in Yorkshire expressed grave concern. The rise and fall in the political barometer was carefully watched in the counting-house at Burley Bar, and Joseph Rogerson of Bramley recorded the harm done by the mere talk of war, "as our trade lies all there for our sort of Goods made here" (p. 78). Charlotte Brontë, in *Shirley*, tells us something of the strain that the industrial population of Yorkshire had to undergo.

A momentary gleam of hope of acquiring new markets came when Buenos Ayres was occupied by the British in 1806, but the eager anticipations of successful developments<sup>1</sup> were robbed of fulfilment by our military failure.

Cloth for the army was a considerable source of business, but mismanagement and corruption in government departments as well as prejudice against Yorkshire goods<sup>2</sup> did not assist matters.

The Hopps letters gradually come to an end. There are two for 1809, two for 1811, and the last is in 1812. The unhealthy state of affairs was aggravated by the acute difficulties with which industry was faced. At length disorder culminated in the armed outbreaks known as the Luddite riots, which originated in the Midlands and spread to Yorkshire. Although Leeds itself was not much affected, Benjamin Gott was a marked man, as is shown by the letter warning him of a conspiracy against his life<sup>3</sup>; but this same letter is striking evidence of the esteem in which he was held by the community as a whole.

Some years earlier another incident in a time of crisis shows his influence and his resourcefulness. During Whitsuntide, 1807, election riots occurred in Briggate. The Mayor lost his head and ordered the troops to fire, with the result that twenty people were wounded and twenty-one others were thrown into prison. Benjamin Gott took the affair in hand next morning, released all the prisoners, and restored order.<sup>4</sup>

The younger Gotts were now growing up. John enclosed messages with the last letters of Hopps, and he signed the accounts of co-partnership as a partner on March 8th, 1815. The younger Benjamin also became a partner in 1816. But on June 7th, 1816, Harry Wormald died, and Benjamin Gott the younger died at

<sup>&</sup>lt;sup>1</sup> Still, May & Co. in No. 108.

<sup>&</sup>lt;sup>2</sup> No. 126, 6 October, 1807.

<sup>&</sup>lt;sup>3</sup> No. 76, 15 May, 1812.

<sup>&</sup>lt;sup>4</sup> Account by C. D. Hardcastle in the Leeds Public Library.

Athens early in 1817. The latter was making the Grand Tour, the first part of his travels in Belgium and France being partly devoted to business, visits to mills and so forth. Some of the antiquities in the Philosophical Hall at Leeds, now the City Museum, were sent to Leeds by him. He was buried in the Temple of Theseus at Athens.<sup>1</sup> Richard Wormald now retired, leaving the elder Benjamin Gott and John Gott in control of the firm of 'Benjamin Gott and Son.'

A passing reference only can be made to its subsequent history. The manufacturing activity of the firm greatly increased after the end of the Napoleonic wars, the amount of coarse woollen fabrics exported to America via Cape Horn and up the Mississippi being particularly noteworthy. Benjamin Gott was an important witness before the House of Lords in 1828 on the need for the free importation of foreign wool. Commenting on his evidence, the distinguished economist, J. R. McCulloch, calls him "one of the most extensive and best informed manufacturers in the empire....this most competent witness."

After the death of Benjamin Gott in 1840 his two sons, John and William, carried on the business. Both father and sons were concerned with the early development of railways; John Gott was the first chairman of the Leeds, Dewsbury and Manchester Railway Company, afterwards the Leeds and Manchester section of the London and North Western Railway Company; he laid the foundation stone of the Morley tunnel.

Various members of the family were greatly interested in art and literature. Benjamin was one of the promoters of the Leeds Philosophical and Literary Society and laid the foundation stone of the Philosophical Hall in 1819, and he was the first president of the Leeds Mechanics' Institute. In politics the Gotts were conservatives, in religion loyal and generous churchmen.

On the death of John Gott in 1867 the firm of Benjamin Gott and Sons came to an end. The family, however, still owned the Bean Ing mills, and controlled the power, which was rented to a number of tenants who occupied various parts of the buildings, among them being Thomas John Kinnear, a nephew of Benjamin Gott, who carried on business for a few years with a Mr. Holt as partner, under the style of Kinnear and Holt. In 1874 Joshua

<sup>&</sup>lt;sup>1</sup> William Miller, The English in Athens before 1821, 1926, pp. 12–18. Some of the facts stated require correction. The marbles only came to Benjamin Gott, senior, after a long period.

<sup>&</sup>lt;sup>2</sup> A dictionary....of commerce, 1846, p. 1,368.

Wilson, a woollen manufacturer of Ossett, came to Bean Ing as a sub-tenant to start in the worsted manufacture. Profiting by the boom in trade after the Franco-Prussian war the new firm of Joshua Wilson & Sons grew until they took over the chief tenancy and the power from Kinnear and Holt. More and more of the buildings passed into their occupation, until now only one other tenant remains, and Joshua Wilson & Sons, in the third generation, utilise almost the whole of the Bean Ing mills, which are still the property of a descendant of Benjamin Gott.

Armley House became the property of the city, though the great bibliographical and artistic treasures it contained had been, alas, previously dispersed. Nearly all these changes are part of the inevitable course of things, but the achievements of one of the greatest of the industrial and commercial enterprises in Yorkshire remain a fitting memorial of a time when England held an unrivalled position in the markets of the world.

Moreover, if the name of Gott thus ceased to be associated with the establishment built up on such sound and honourable principles, none the less the good tradition of civic service continued to be upheld by the descendants of the founder of its fame.

Dr. John Gott, who died in 1906, was one of the most eminent churchmen of his time, first as vicar of Leeds, then as dean of Worcester, and lastly as bishop of Truro. Mr. Frank Gott (d. 1920) was Lord Mayor of Leeds in 1917–18. Mrs. Frank Gott is a magistrate and an alderman, being at the present time deputy-chairman of the Education Committee.

The Gott Papers in the University Library are the welcome yet all too scanty surviving records of this great house. Too often such documents have been destroyed as of little worth: in fact comparatively little has come to light of the business archives of Leeds during the 'Industrial Revolution.' It is to be hoped that any other fragments that remain may find a permanent home beside such a collection as that presented by Mrs. Gott to the University of Leeds. Indeed, some further letters, preserved at Bean Ing, have been added to it since this was written, as a result of the search for information there.

#### GOTT'S RELATIONS WITH SOHO.

BY HERBERT HEATON, M.A., M.Com., D.Litt., Professor of Economic History, University of Minnesota.

In August, 1793, the Boulton and Watt engine was finally set to work at Bean Ing, and early in the following year the leisurely discussion concerning the premium to be paid for the use of the Watt patents came to an end with the payment of £960 to cover the period till the patent expired in 1800. But the relations between Bean Ing and Soho did not end, for between the engine-builders and the factory-builder there had developed an intimate friendship which was to last for many years to come. Lawson, who had come to Leeds to superintend the installation of the engine, was a welcome guest at the Gott home, and was on such intimate terms that he was able to end a business letter to Gott as follows:—" I shall be obliged to you to pay three shillings to the hair dresser at the King's Arms—as on looking over some memorandums I do not find I have paid him, and am affraid I forgot him. I am sorry to trouble you with such a paultry thing, but it is very unpleasant the having forgot such a triffle." Bean Ing was used by Soho as a poste restante to which Watt's travelling representatives resorted to collect letters and instructions when they were in the north.

If Soho used Bean Ing in this way, Gott replied in kind. He wrote frequently to Lawson, giving personal and family news, reporting how the engine and equipment were working, describing new experiments he was making, and asking for goods or information. "I beg you will send me by coach," he wrote in 1795, "a pair of very fashionable patent buckles. I have given mine, and am in immediate want of a pair. These I shall repay you for when we meet." At another time he wrote, "Send me the new rules for the sick and hurt workmen's funds of the manufactory. When I had the pleasure of seeing Mr. Boulton they were undergoing a revision, which induced me to defer establishing our society. Go look at some thermometers I am buying in Birmingham" send up a lot of cotton wicks for the patent lamps; don't forget the indicator. Whenever he went south, Gott tried to spare time for a visit to Soho, and his friendship with Boulton, Rennie, Murdoch, Watt, Southern, and the other Soho chieftains lasted as long as they lived. In his home at Armley he had in later years busts of both Rennie and Watt.

By his many experiments with steam and his loading of Bean Ing with equipment Gott soon taxed the resources of the engine to the limit. By 1795 he was writing to his Soho advisors, "I am told the polishing of Mr. Lee's Cylinder answers admirably. If we continue to add to our weight of machinery we shall soon have occasion to apply every improvement. Our fireman now complains of the difficulty of keeping up the steam. The engine keeps its proper speed and the pressure about 9 to 10 lb., certainly not 11 lb. I shall be glad to hear from you and if anything new has occurred in the mode of polishing the cylinders do not omit to inform your friend and obedient servant."

Of Gott's many experiments his most famous were in the use of steam in his dyehouse and drying-sheds. The details are not known, but he seems to have heated the dye-liquids by injecting steam into them instead of heating them over a fire. Whatever his improved technique was, he spent thousands of pounds developing it, and won fame among his contemporaries for his persistence, resourcefulness, and willingness to spend money on the experiments. In all this work he was frequently appealing to Southern, of the Soho foundry, for advice, suggestions, and criticisms of his own ideas. Southern's replies are copied in the Foundry Letter Books, and they positively glow with friendly personal feeling at times. One letter ran over twelve sides of paper, full of detailed suggestions and criticism. The steam expert did more than supply steam engines.

Gott's establishment was more than a poste restante. It was a starting-point from which to launch attacks on those who were pirating Watt patents, and especially on the chief offender, the Bowling and Low Moor Iron Works. As early as 1793, Lawson, the engineer, suspected that Bowling was doing those things it ought not to do. Respect for patent rights was scant all through the 18th century, and in the thirties and forties Leeds weavers had openly used Kay's flying shuttle, but had refused to pay the inventor a cent for the privilege. But usually offenders were more careful, and the rooms in which pirated machines were at work were carefully guarded from prying eyes. Lawson therefore had to resort to strategy in order to get a peep at an illicit engine which he suspected was at work at Bowling. Bowling happened at the time to be casting some wheels for an engine Lawson was erecting

<sup>&</sup>lt;sup>1</sup> See No. 57.

<sup>&</sup>lt;sup>2</sup> See the evidence of James Graham, M.P., in the Report of 1806, p. 444.

in or near Leeds, so he used this as a cover for his visit. He took a mechanic with him to Bowling to ask how the making of the wheels was progressing. This question was naturally to be asked at the office, but the mechanic was told to hurry to the engine-house and there enquire where the office was, using his eyes while he asked the question. The ruse was successful, for he saw all he wished to see before the engine attendants could order him out and inform him that no one was allowed to step into that room without permission.

Late in 1795 still further evidence was secured, and James Watt, jun., therefore determined to come north on a pirate-hunting expedition. Before coming he wrote to Gott, asking the names of the Bowling owners and also of the owners of a Leeds cotton mill which was using a Bowling engine. Gott supplied them, and in addition secured for Watt the services of a Leeds lawyer, Mr. Nicholson.¹ In January, 1796, Watt, accompanied by Lawson, made his northern trip, visiting the firm's customers and fighting its enemies. "Our Leeds customers have been neglected by the principals of the house," he wrote to his father, "having never been visited by you or Mr. Boulton. It is therefore highly necessary that some of us should see them, if it were only a mere matter of civility." His visit was profitable, for various orders for engines were given him in the first week after his arrival. "Marshall and Benyons are in want of another," he wrote, "and we have had a most curious conversation and too long to detail at present: suffice it to say that Marshall is an arrant Jesuit, and that I came up to Mr. Whateley's character of me in the negotiations."

Meanwhile he set out to get a glimpse of the offending engines. He got into the suspected cotton mill, and identified the air pump as being a copy of his father's pattern; "but the concealed situation of the condenser and its machinery prevented us from seeing it.. The engineman was violently suspicious, but yet, like a blockhead, let us inspect as much as we wanted and gave us full information about the air-pump." At the next mill, however, Watt was not so lucky. He introduced himself as a Manchester man interested in cotton-mill engines, but did not act the part sufficiently well; his host became suspicious, he was bundled out of the mill, "and soon the news was all around the town that two of the patent fellows" were prowling round.

An injunction was immediately secured against Sturges, the

<sup>&</sup>lt;sup>1</sup> See Nos. 61 and 62.

Bowling iron-master, and all users of Bowling engines. Sturges was forbidden to make any more engines in which an air-pump was used to discharge the air and condensed vapour, or in which the steam was condensed in a vessel distinct from the steam cylinder. But Paley, the Leeds cotton-mill owner, and other engine-owners were informed that they might continue to use their engines, provided they paid Soho the full premium for past and future use of the Watt patents embodied in them, "as other customers do."

On receiving this injunction Sturges protested that Watt's conduct "was very extraordinary, as his engines were not upon our principles"; and Watt learned through "a secret channel" that two engines were still being used at Bowling. Paley of Leeds was away in London, so Watt went off to look at some Newcastle pirates, leaving Gott to handle any developments that might take place during his absence. "I hope it will not be long before I have extirpated this La Vendée," he wrote. Soon Gott was able to write him that both Sturges and Paley "mean to come to our terms and pay the full premium for past and future," so Watt returned to Leeds to consolidate the victory. He demanded interest on the arrears of premium, insisted that Bowling stop all illicit use of his father's devices, and asked that the sinners pay all law expenses. He also said that "if any differences arise over the wording of the proposal, the construction shall be determined by Messrs. Cookson and Gott." The sinners cried out at the severity of the terms, but Watt replied that he was leaving Leeds at once, and if acceptance was not immediately forthcoming he would withdraw his offer and let the matter go to court. Within two days Sturges was at Nicholson's office to announce complete submission. Six months later Paley decided to scrap his old engine and get

Six months later Paley decided to scrap his old engine and get a new one from Soho. Once he became a potential customer Watt immediately began to treat him with solicitude, congratulating him on having decided to get a decent 20 h.p. engine "in place of your present enormous one." The old engine had been rated at 45 h.p., but had never delivered so much power. Although coals were "so cheap as to be no object," Watt was able to point out that the new engine would really be far more economical in every way. "It will turn 2,000 spindles: you have 1,400. It will take 18 cwt. of coal per 12 hours: your old engine burns 45 cwt." The material and premium would cost f665. Watt salved Paley's wounds with salt and sugar as follows:—"In view (of your payment of this sum) Boulton and Watt have agreed to cancel the claim on the

past premium on the old engine, in view of the very great expence you have already been put to, and that the enormous excess of power must have absorbed the benefit arising from the use of their principle in it."

At the same time Sturges was mollified by being told that he owed Soho only £1,640 on the two illicit engines he used at Bowling. The amount, he was informed, should really have been £2,460, but one-third of this sum was being deducted on account of the badness of the engines and of their being under-utilized. The interest on past premiums was also remitted, as were all other costs except lawyers' fees.

After that, peace reigned between Bowling and Birmingham. But within three years Watt was aware that another Richmond was in the field, in the form of Matthew Murray, the quality of whose engineering work excited the grudging admiration of the visitors who came from Soho to see his plant. When Watt came north in June, 1802, to launch the attack on the Leeds rival, he lost no time in consulting Gott, and learned from him all he could about Murray and his colleagues. What part Gott played in the subsequent unsavoury proceedings is not clear, but he evidently did go with Watt " to inspect some situations in the neighbourhood" of Murray's works, a visit which led Watt eventually to buy land in order to prevent Murray from having room for expansion. Ten years earlier Watt had been denounced by Robespierre before the Jacobin Club. One would like to have heard the conversation concerning him when the shades of Murray and Robespierre met.<sup>1</sup>

### BOULTON AND WATT ENGINES IN YORKSHIRE.

Gott's engine was not the first sent to Yorkshire from Soho. An index of Boulton and Watt engine plans in the Birmingham Public Library gives the following chronicle:—

# Sun and Planet Engines.

1784. 7 H.P. engine for an oil-mill at Sculcotes, near Hull.

1786. 10 H.P., for a paper mill at Hull. 1788. 14 H.P., for a corn mill at Hull.

1792, 20 H.P., for Marshall, Fenton, and Dearlove's cotton (?) mill May at Holbeck.

<sup>&</sup>lt;sup>1</sup> For the letters on this episode see Kilburn Scott (Ed.), Matthew Murray, Pioneer Engineer, Leeds, 1928, pp. 33-43. The letters on which the above notes are based are all in the Boulton and Watt Collection in Birmingham, but have not yet been indexed or catalogued where they were "inward." Copies of letters sent from Soho are to be found in the various Letter Books. There may be some letters from Gott to Soho which have escaped my attention.

1792, do H.P., for Wormald, Fountaine & Gott.

1792, 30 H.P., for Markland, Cookson, and Fawcett's cotton mill Aug. at Leeds.

1792, 22 H.P., for Beverley, Cross, and Billiam's cotton mill at Sept. Hunslet.

1793. 6 H.P., for a brewery at Rotherham.

1793. 20 H.P., for John and James Walker's woollen mill, Wortley.

1794. 28 H.P., for Marshall and Benyon's flax mill at Leeds.

1795. 16 H.P., for oil mill at Hull.

1795. 12 H.P., for Halliday and Cockshott's worsted mill at Baildon.

1795. 20 H.P., for Foster's woollen mill at Horbury.

1795. 20 H.P., for Gowland, Clark, and Co., cotton (later worsted) mill at Leeds.

1796. 16 H.P., for Nevins and Gatliff's woollen mill at Hunslet.

1796. 20 H.P., for Nussey and Co., woollen mill at Birstall.

1796. 20 H.P., for Bateson's cotton mill at Wortley.

## (Beam) Crank Type.

1796. 20 H.P., for Blagbrough and Holroyd's cotton mill, Leeds.
1796. 36 H.P., for Holdforth, Wilkinson and Paley's cotton mill, Leeds.

There were, of course, engines of the Savery or Newcomen type also in use, and Low Moor was in the nineties making engines. But Gott's engine was the fifth Boulton and Watt engine to be ordered in Yorkshire, and the second to be used in a textile factory. Three days before Gott's order reached Soho a contract had been signed for the first 40 H.P. engine to be made by Boulton and Watt; so Gott narrowly missed the honour of having the first big engine made by Soho, and for many years it was the most powerful engine of its kind in the county. It used 6 tons of coal a day. The cylinder diameter was  $31\frac{1}{2}$  inches, the stroke 7 feet, and it made 35 revolutions a minute.

## THE PAPERS OF BENJAMIN GOTT

Transcribed by R. Offor, Ph.D.

1 Indenture of Apprenticeship of Benjamin Gott to John Wormald & Joseph Fountaine. [Condensed.] I January, 1780.

This Indenture of Three Parts made the 1st January, 1780 between Benjamin Gott Son of John Gott of Woodhall in the parish of Calverley in the County of York Gentleman of the first part the said John Gott of the second Part and John Wormald and Joseph Fountaine both of Leeds in the said County Merchants and Copartners of the third Part Witnesseth that Benjamin Gott of his own free Will and with the Consent and Approbation of his Father Doth hereby bind himself with the said John Wormald and Joseph Fountaine after the manner of an Apprentice to serve them or the Survivor of them for the Term of Four Years from the Date hereof In Consideration whereof and of the Sum of £400 to them by the said John Gott at or before the Sealing and Delivery of these Presents well and truly paid. They do severally promise and agree that they will during the Term of Four Years next ensuing the Date hereof Teach Learn and Instruct Benjamin Gott their Apprentice in the Trade or Business of a Merchant in buying and selling of Cloths and all other Goods and Merchandizes whatsoever bought and sold by J. W. & J. F. and that Benjamin Gott shall be at full Liberty from Time to Time and at all convenient Times during his Apprenticeship to inspect and peruse the Books of Account belonging to the Partnership and to attend all Business done in the Shops Warehouses and Counting Houses of J. W. & J. F. and shall also attend and assist in the Transaction and Management of the Trade and Business of J. W. & J. F. at all such Markets as J. W. & J. F. their Apprentices or Servants usually attend in the Way of their Trade and Dealings and also shall in the last Year of the said Term go the Northern and Southern Journies annually taken by J. W. & J. F. or their Servants the said John Gott de-fraying the Expence of Horse Hire and also his Sons Expences when he goes such Journies for his Improvement But J. W. & J. F. agree to pay the Expences when he attends the Markets at Huddersfield the said John Gott finding him a Horse at all such Times And it is also hereby further agreed by J. W. & J. F. that they shall and will at all times during the Term of the Apprenticeship find and provide for Benjamin Gott sufficient of Meat Drink and Lodging And the said John Gott doth hereby covenant promise and agree to and with J. W. & J. F. that Benjamin Gott during the Continuance of his Apprenticeship shall and will well and faithfully serve and be just and true to J. W. & J. F. and the Survivors of them as to fore concerning the Goods and Effects and all other Matters committed to his Charge and keep their Secrets and execute all their lawfull Commands and demean and behave himself Soberly Justly and Civilly to J. W. & J. F. and well and truly perform and dispatch their lawfull Business from Time to Time during the said Term and that Benjamin Gott shall not at any Time Embezle Cancel or otherwise destroy any Letters Bills Bonds or other Writings Goods Wares Merchandize Sum or Sums of Money which shall belong to J. W. & J. F. but thereof from time to time shall give a just Account and deliver and pay the same to J. W. & J. F. and also that Benjamin Gott shall not at any Time during the Term wilfully absent himself from their Service but shall duly attend to and perform the lawfull Business of J. W. & J. F. honestly and with all convenient Expedition and Willingness in manner above mentioned In Witness whereof the Parties to these presents have hereunto interchangeably set their Hands and Seals the Day and Year first above written.

Sealed and Delivered (being first duly Stamp't in the Presence of Geo. Coulton James Livesey

Benjamin Gott John Gott John Wormald Joseph Fountaine

2 Articles of Copartnership between John Wormald, Joseph Fountaine, and Benjamin Gott. I January, 1785.

[Condensed.]

The Heads or Instructions for Articles of Copartnership between

John Wormald of Leeds Esq<sup>r</sup> Joseph Fountaine of the same place Esq<sup>r</sup> and Benjamin Gott of the same place Merch<sup>t</sup> as follow First. The said John Wormald and Joseph Fountaine from the great confidence they have in the Integrity Honesty and Abilities of the said Benjamin Gott have Agreed to take in and enter into Copartnership with him for the Term of Five Years commencing from the first day of January last, in the Trade or buisiness of Cloth Merchants which J. W. & J. F. now follow such Trade to be carried on and managed under the firm of Wormald Fountaine & C°.

That Stock Cloth Debts (exclusive of bad Debts) and other Effects in Trade belonging to J. W. & J. F., which upon an Account and Valuation made upon the I<sup>st</sup> January last, amounted to the Sum of £36,600 shall be taken as the Capital Advanced into the Trade by Mess<sup>rs</sup> W. & F., Viz., £18,300 by J. W. and £18,300 by J. F., and that Benj<sup>n</sup> Gott shall advance into the Trade the sum of £3,660, which several Sums making together the Sum of 40,260£ Agreed to be the Capital Stock in Trade of the Copartners and to be used in the Trade for the best Advantage of all the parties according to their respective Interests therein.

3<sup>rd</sup> That all such Sums of Money as the Copartners now or shall have in the Trade over and above the respective Capitals aforesaid, shall be paid an Interest for at the Rate of £4 10s. per Centum pr

4<sup>th</sup> That the Trade shall be carried on in and upon the premisses belonging to J. W. where such Trade is now Managed and for which J. W. shall receive the sum of £60 as a Rent for the same.

5<sup>th</sup> That J. W. shall at any time during the said Term without any Gratuity or Apprentice Fee, take as an Apprentice or Apprentices any of his Sons to be initiated or instructed in the said Trade he the said I. W. at his own Expence providing for such Sons all necessaries.

6<sup>th</sup> That each of them J. W. & J. F. and each of their Executors and Administrators shall during the continuance and at the End of the copartnership have the full right property and Interest in 5 Eleventh parts, and Benj<sup>n</sup> Gott shall have the full right property and Interest in the remaining I Eleventh part of the joint Stock and other matters and things belonging to the Copartnership which shall remain after Payment of all Debts due on Account of the Copartnership, and also the same proportionable parts of all Gains, profits and increase which shall accrue by the said Trade and likewise pay all Losses Costs Charges and Expences Rents and Damages in the same Proportions.

7<sup>th</sup> The Stock Buyings Sellings and all other matters relating to the Copartnership to be entered into proper and suitable Books

for that purpose to be kept in the Countinghouse [etc.].

All Securities for Money or Goods taken for any matter relating the Copartnership and all Ğoods to be Sold out of the joint Stock or Trade upon Trust shall be made in the Names of J. W. & J. F. and Benin Gott and for their Benefit in the Proportions before

mentioned [etc.].

That no Credit shall be given to any person or persons whom any of the parties shall forewarn should not be Credited, Nor any Apprentice taken during the Copartnership but with the joint consent of all the parties, except such of the Sons of J. W. as he shall think proper to take as aforesaid nor any Debt, Referred or

Compounded without the Consent of the others [etc.].

10<sup>th</sup> That Benj<sup>n</sup> Gott may on the first Monday in every Month during the Copartnership take out of the Profits of the joint Stock the sum of 12f in his particular uses. And that J. W. & J. F. may take out of the joint Stock and Profits thereof so much Money as shall bear a due proportion to the said sum of 12£ to be taken thereout by Benj<sup>n</sup> Gott as their respective Capitals bear to the

Capital of Benj<sup>n</sup> Gott for their particular uses.

II<sup>th</sup> That at the End of the Copartnership or at any time Afterwards during such time as Benjn Gott shall be connected with J. W. & J. F. or either of them or with any part of their Families Benj<sup>n</sup> Gott shall and will agree to take into the share of the Trade all or any of the sons of the said J. W. when and as they shall arrive at Age qualified to take a share in such buisiness, So that the taking into partnership of the Sons of J. W. or any of them does in no wise lessen the Share & Interest of the said Benj<sup>n</sup> Gott in the joint Trade—and for that purpose Benj<sup>n</sup> Gott shall enter into and give a Bond in a sufficient penalty for that purpose.

12th That no Benefit of Survivorship shall be had or taken [etc.]. 13th That each of the parties will execute proper Articles of

Copartnership.

3 JOSHUA WALKERI to WORMALD FOUNTAINE & GOTT,

Rotherham, 14 May, 1792.

We have your Favr: of 12th Inst.—below you have our Prices of Castings for Engines—with which we shall be glad to serve you-

Should you not be engagd to any particular Engineer we beg leave to recommend M<sup>r</sup> P. Trummel of Hunslett who we make

no doubt will give you satisfaction should you employ him.

Cylinders Working Barils Branch Pipes & 21/deliver'd at Leeds— 15/-Bucket door Pipes Common Pipes 13/small

Joshua Walker to W. F. & G., Rotherham, 2 June, 1792. 4 We have your Fav<sup>r</sup>: of 1st Inst.—we are sorry we omitted to give you the Price of Vatts, on refering to your Letter find it was our fault.

The Price will be £15 pr Ton laid down at Leeds.

JOHN SOUTHERN<sup>2</sup> for BOULTON & WATT to W. F. & G., 5

Soho, Birmingham, 6 August, 1792.

Boulton & Watt Foundry Letter Book, fol. 101.

We have your favour of the 4<sup>th</sup> informing us for the first [time] that you have given M<sup>r</sup> Ewart an order for a 40 horse engine, in aid of your wollen manufactory. We suppose he may be waiting to give us a sketch or plan of your situation together with the order for the engine, that we may be properly qualified to make drawings of your engine-house. We will write him this post, and as soon as we receive the necessary instruction you may depend upon it your business shall have every possible dispatch.

John Southern for Boulton & Watt to Peter Ewart,3 Soho, Birmingham, 6 August, 1792.

Boulton & Watt Foundry Letter Book, fol. 101.

Messrs Wormald Fountaine & Gott have given us a letter confirming the order for a 40 horse engine that you received, and desiring to have drawings of their ground work. As we know nothing about the matter we suppose you may have some information for us by which we may be enabled to make the drawings for their house, as also for Messrs Markland Cookson & Co.

<sup>1</sup> This firm was founded by Samuel Walker, who died in 1782: his foundry became "one of the most extensive and flourishing of the kind in Europe." C. Mayhall, Annals of Leeds, 1860, p. 163.

<sup>2</sup> For an account of Southern, see Dickinson and Jenkins' James Watt and the Steam Engine, 1927, pp. 255-6. He joined the firm in 1782 at the age of 24 through Boulton, the latter expressing the hope that Southern would give up his music, "the source of idleness." With Boulton and Watt he remained for the rest of his life, becoming a partner in 1810.

<sup>3</sup> See note to No. 10.

7 John Southern for Boulton & Watt to W. F. & G., Soho, Birmingham, 17 August, 1792.

Boulton & Watt Foundry Letter Book, 103.

Pr the Sheffield coach to morrow morning we send you drawings of your engine house marked AYH, [etc.]. It has not been in our power to make them sooner, as our other business has been urgent and myself a week from home. Mr Ewart would give you a general idea of the house, and we hope the present drawgs will be sufficiently explicit. We request your undertaker will carefully look over them, and if there be anything about them which he does not clearly understand, that he will apply here for explanation. The working beam of the engine is to be 30 inches deep by 13 wide & 23′ 6″ long, of straight grained young oak, seasoned if possible. The timber of the sill of the fly framing should be kept dry if possible, and a pipe laid to the river, if it be near, to supply the injection. You will please to inform us how you intend this matter to be.

The boilers we have contrived as well as we could to suit your wood mill. Do you make the boilers in your neighbour<sup>d</sup>? if so we will send you drawings; and would you chuse to erect them both at once, and whether both steam pipes? Would you prefer to make some of the castings in your neighbourhood, and if so, what parts.

[P.S.] The fly shaft or engine shaft will make 35 turns pr minute.

8 JOHN SOUTHERN for BOULTON AND WATT to W. F. & G.,

Soho, Birmingham, 29 September, 1792.

We have your fav<sup>r</sup> 27 before us, and will observe its informations; we likewise acknowledge your fav<sup>r</sup> of 22<sup>d</sup> ult<sup>o</sup> which we did not think required a more early reply. We cannot speak positively as to the time we shall be ready, but as nearly as we are now enabled to guess it may be about the middle of March when we shall have the goods ready to send off; it is our interest to get them sooner

ready, but we dare not promise.

Some Gentlemen prefer paying a gross sum in lieu of the annuity, and we beg leave therefore to state what that is, leaving it entirely to your own choice which to adopt. The annuity I apprehend you are informed is £200 from the time the engine is set to effective work, till Midsummer 1800, unless you stop for upw<sup>ds</sup> of 12 months at once, in which case the premium ceases for the whole time of stoppage. The gross sum will be £1000 payable in 3 Mo: after the engine is set to work. We shall be obliged by your favouring us, at your leisure, with the mode of payment you prefer, and likewise with the name of the Gentleman or Gentlemen who are to form your party in the agreement, of which, when we have these particul:<sup>rs</sup> we will send you a copy.

[P.S.] May we take the liberty of enquiring of you respecting the

responsibility of Messrs Beverley Cross & Co of your place.

JOHN SOUTHERN for BOULTON AND WATT to W. F. & G.,

Soho, Birmingham, 16 October, 1792.

In reply to your favour of 10th respecting the annuity, & gross sum in lieu, we have to observe, that in proposing for the Latter £1000, we made every allowance for stoppage &c that our rule warrants, and it would be a breach of it were we to agree to any deduction being made out of the froot for any circumstance that may happen. We therefore will thank you, under these circumstances, to say which mode of payment you prefer, as we have no preference, and by no means do we intend to influence yours.

We have not heard from Mr Lowe, and as we know (by experience) that he is rather dilatory in writing, we think that it

may be of service if you were to press him a little in that respect. We are sensible of, and desire to return thanks for the favour you have done us by the enquiry you made for us.

[On a single sheet inserted in the letter.]

Mess<sup>rs</sup> Bolton & Watts Price of an Engine the Power of which is equal to raising 100,000 lb. of Water 10 feet high p Minute.

All the metal Materials of the Engine exclusive of Boiler

and wrought Iron work of the Framing

Mrought Iron Poiler Wrought Iron Boiler . . Putting together ... £1071

- this Engine equal to the Power of 30 Horses the Cylinder 28½ Inches N.B. Diameter.
- Peter Ewart<sup>1</sup> to Benjamin Gott, Stockport, 26 October, 1792. Dear Sir Having been from home for some days I have been prevented from receiving your favor of the 20th till just now—
- <sup>1</sup> Peter Ewart first comes into this correspondence in the letter to him from John Southern [No. 6]. We find in this letter that he was already intimate with the Gotts.

There is an account of him in Dickinson and Jenkin's James Watt, p. 288. Here it is stated that Ewart, at the age of 15, was introduced by Lady Hopton and Professor Robison to Boulton and Watt. Professor Robison (1739–1805, see art. D.N.B.) was James Watt's early friend: a letter from him to Watt says that Peter Ewart was a near relation of his. Ewart was the son of a Dumfries clergyman and was born in 1767. In 1788 he was working under Rennie at Soho. From 1790 to 1792 he was at Manchester, working for Boulton and Watt. He went into business at Manchester but does not seem to have been at first very successful, as he was back at Soho in 1795-6. From 1798 to 1835 he had a cotton business at Manchester, but in the latter year he became inspector of machinery in the royal dockyards at Woolwich, where he died from an injury in 1842.

Ewart's brothers were all men of mark, his brother William Ewart of Liverpool being the friend of the Gladstone family there and giving his name to the famous statesman. The families of Ewart, Lee and Gott were all connected by marriage. Lee married Peter Ewart's youngest sister; see the very sentimental letter from Lee to Gott [No. 69]. William Ewart, the son of the Liverpool merchant, chiefly known for the part he played in initiating the public library movement, married his cousin Mary Anne, George Augustus Lee's daughter. Lastly, William Ewart's daughter Margaret

married in 1821 Benjamin Gott's third son, William.

With regard to your Engine house; the surface of the water was not marked when I was first there, but I took it to be about  $7\frac{1}{2}$ feet below the ground floor of the building-However that is of no consequence, for it is sometimes higher and sometimes lower-When I was last there with Mr Lowe, we fixed upon the center of the Rotative Shaft to be level with the top of the stone wall of the Building i.e. 6 Inches below the ground floor, which I particularly poi[n]ted out to Rob<sup>t</sup> Weir, and desired him to set off every other height belonging to the Engine house, from that place agreeable to the Drawings—for instance, the "Bottom of the Engine Cellar" must be 7 feet below the top of the stone wall, or center of Rotative Shaft and the top of the "Spring Beams" must be 22 feet 4 Inches above it;—and so on with the other dimentions; all which Robt Weir said he perfectly understood—He should be admonished to refer to the Drawings frequently, otherwise he will be apt to commit

I return you & Mrs Gott many thanks for your kind offers to my Sister, who has not yet determined upon the steps to be taken with regard to the education of her Son—

11 James Lawson<sup>1</sup> to W. F. & G. 'For Mr Gott,'

Soho, Birmingham, 20 November, 1792.

Yours of the 15<sup>th</sup> I duly rec<sup>d</sup> I am sorry I did not inform you sooner that the Boiler of Mess<sup>rs</sup> Marshall & Fenton is much too small for your Engine—indeed it is not quite large enough for a thirty Horse.

I wrote to you some days ago with the Invoice of the Copying

Machine [and] Lamps which I hope by this time you may have received—I shall be glad to hear that they please.

I shall be Obliged to you to pay 3/- to the Hair dresser at the Kings Arms—as on looking over some memorandums I do not find I have paid him. I am affraid I forgot him.

I am sorry to trouble you with such a paultry thing, but it

is very unpleasant the having forgot such a triffle—

I remain with Comp<sup>ts</sup> to M<sup>rs</sup> Gott, Your most obd<sup>t</sup> Serv<sup>t</sup>.

12 JOHN DENNIS to W. F. & G., Penzance, 29 November, 1792. In reply to the Letter annex'd to your Invoice dated 24 Inst. I beg leave to say Tin (Block Tin) deliver'd in London is 98/-

<sup>&</sup>lt;sup>1</sup> James Lawson, a close personal friend of Benjamin Gott, as appears from these letters, was an important member of Boulton and Watt's staff. The chief facts about him are set forth by Dickinson and Jenkins, James Watt, p. 286. He started at Soho in 1779. Part of his work was the surveying of mines on behalf of the firm; he was an able draughtsman. There appears to have been friction between him and other members of the Soho establishment, but his ability was clearly recognised by Boulton. He did outdoor work at Leeds and Manchester and the younger James Watt set a high value on his services. Lawson became superintendent of machinery to the Royal Mint in 1811, but retained a connection with Boulton and Watt. The Royal Society elected him a fellow in 1812. He died in 1818.

but if you take it from here there will be a difference of I to 2/pr Cwt in your favour[.] there is never a discount deducted on Tin[;] it is Money throughout purchasing it up here from of the Coinage[.]¹ the Commission is I¼ pr Cent & the price £4/Io/- p[cwt] at wh as below you will see whence the difference between here & London[.] Grain Tin cannot exactly say the price but beleive it to be about 8/- p Cwt more than the other, it is only smelted in one place in the County & can procure it at any time. I shall be happy to receive your Commissions for any quty[.] The demand for Tin has been astonishingly great of late & there is no appearance of fall[.] the price now at is fixed for Two years certain. This County promises to be very flourishing[:] every Mine is going to work & we are all Mining Mad.... The demand for Wool is very great & a rapid advance made on it[.] with you I will thank you to let me know at what prices it may go at[.] I have a quty by me & should if I could see an advantage dispose[,] but that article is greatly advanced here 25 pr Cent more than last year, you can say what Noils [and] Tag locks [are,] we may understand really that price, as to Super we know Samples would be necessary to fix the price which I should be ready to do being convinced of the superiour quality of some I have. I will thank you to say the prices.

14 10 — Tin

24 0 Princes duties
5 Shipping charges

£4 · 10 · — Tin

4 · 0 Princes duties

5 Shipping charges

1 · 2½ Commission

4 · 15 · 7½ pr Cwt weight

10 freight that is 168/ Ton

The Blankets we sell are somewhat of a courser Wool than yours but they are thicker & dressed both sides[.] are those now of this kind that you mention. they are liked best.

# 13 WILLIAM FORMAN for JAMES WATT & Co to W. F. & G.,

Soho, 10th Decr, 1792.

We have this day rec<sup>d</sup> yours of the 6<sup>th</sup> inclosing a Bill for Seventeen Pounds twelve Shillings & Sixpence in full for a Copying Machine & plated wane sent to you from this place.

# I4 JOHN SOUTHERN for BOULTON & WATT to W. F. & G. [on same sheet.]

We have yours desiring us to procure you your 2 boilers, but, since we first proposed the question to you whether you or

<sup>1</sup> For many centuries a tax on the tin, after smelting, was paid to the earls and dukes of Cornwall. The smelted blocks were carried to certain towns (Liskeard, Lostwithiel, Penzance, Truro) to be coined; that is, a corner of the block was cut off and the block was then stamped with the duchy seal as a guarantee of the quality. By an act of 1838 the dues payable on the coinage of tin were abolished, and a compensation was awarded to the duchy in their place. *Encyc. Brit.*, 11th ed., vol. 25, p. 782. Article on Stannaries.

we should get them, we have found that to transport them from the distance, either of Bersham (near Wrexham) or here, especially such large ones as yours, is attended with much danger of breaking the joints; and that to send them in a few parts is likewise not advisable, when Gentlemen can get them made near the place of erection. As we conceive this to be the case with you we recommend that you get them made in your own neighbourhood, and for that purpose we will send you drawings, along with others for some other parts which we also suppose it will be your interest to make. The rotative shaft is not made, and we shall therefore attend to what your letter mentions relating it & the stock-shaft, but will suspend any observations about it till we have drawn your engine, further than we are apprehensive relating the length.

JOSHUA WALKER to W. F. & G., 15

Rotherham, 15 December, 1792. We are favour'd with yours of the 12th Inst.—the long Boilers we have made have been deliver'd at Leeds p 37s/. fre[e on delivery] we do not apprehend much would be sav'd by Water Carriage—Should you have occasion for any, please favour us with your commands soon, and give us as much time for the execution thereof as possible—these short days are very unfavourable for the business of Boiler making—We mention this, that if they are not wanted immediately you may accommodate us and give us a Month or two for the execution of them.

16 Quotation for Dyewoods by J. R. & Sons, 27 December, 1792. Fine honds Logwood .. a  $\cancel{\xi}9 \cdot \text{Io}/$  Fustick, from Jama Do .. a  $\cancel{\xi}9 \cdot \text{5}/$  Peachwood .. Barwood .. a  $\cancel{\xi}9 \cdot \text{5}/$  Young Fustick [added by B. Gott:—]  $\cancel{\xi}$  s d  $\bigcirc$  Ore 9 · I5 · O £9 a £12 a £11 a £16 a £22 a £11.5/-

These prices are daily subject to a change, but will always be rul'd in the charge by the quality & times TR & Sons.

17 WILLIAM PRESTON & Co to W. F. & G.,

London, 19 January, 1793. We duly rec'd your M<sup>r</sup> Gott's favor under date of ye: 16: Inst:—and will forward you ye Samples—required in all next Week—as under you have ye prices of sundrys, mention'd in yours of ve: above date.

Yesterday our Fishmonger forwarded you three Barrels of Oysters pr: Hicks & Co Waggon which we hope will arrive safe and prove good, which we shall be glad to hear—(viz) one Barr1: for Mrs Wormald one for Mrs Fountaine & one for Mrs Gott.

Inclosd we return your Bills on R & Co. Wishing you all many happy years and a Good Ballance of your yearly settlement. We rem<sup>n</sup>: w<sup>th</sup> perfect esteem, Sirs your Most hble Serv<sup>ts</sup>:

Will<sup>m</sup>: Preston & Co.

Barwood £8 7 6
Cuba Fustick £9 10 to 9 15 pr Ton
Peach Wood; large £18 to 20 pr Ton
Do Small £8 to 12 - do Sanders — £10 · 15 - do Honduras Logwood £6 5 to £6 10—£6 15 pr: Ton.
Campeachy Do— £9 15 to £10 pr Ton
These are ye: nominal prices of this day Monday they may vary.

These are ye: nominal prices of this day Monday they may vary. N.B. We wish you to place some confidence in us and you may depend you will experience advantage—for, writing backwards & forwards and sending Samples, a Great deal of time is lost—and ye Market for all our Articles, so fluctuating particularly at this time when War is expected every day, if that should be ye: case; most or all the Articles you now have prices quoted wou'd rise 20 p Ct: in one day—all this for your Gover'ment. Yrs etc. W: P & Co.

18 John Sturges & C<sup>o</sup>.¹ Bill and Receipt, 1792–93. Mess<sup>rs</sup> Wormald, & Co. To John Sturges & Co.

[cwt. qr. lb.] 
$$f$$
 s d  
1792 Dec<sup>r</sup> 28 To I Pan 3I 3 7 .. 14/- .. 22 5  $4^{\frac{1}{2}}$   
1793 Jany 12 do 32 - 20 .. 14/- .. 22 10 6  
25 48 Grate Bars 7 - 22 .. 10/- .. 3 II II $\frac{1}{2}$   
12 Beams 6 3 I3 .. 10/- .. 3 8 7

Rec<sup>d</sup> 2 July 1793 of Mess<sup>rs</sup> Wormald Fountain & Gott Fifty one Pounds 16/5 in Pa<sup>t</sup> John Sturges & Co.

19 CHRISTOPHER BROOKE to BENJAMIN GOTT,

Clifton [Brighouse], 22 January, 1793. Mr Gott. Sir shall be glad to serve you with Cards for your place when your are reddy as I have maide a great quantity for Mr John Mellor of Mickelhirst and for Mr James Harrop Grasscroft which they approve of for good ones have maide them cards for Carding and Scribling and if you think proper to employ me shall be glad to you for your orders and I shall be glad to have a line by Mr Wormald in a Week or twoe as it sutes your Honour and if you think proper that I should come to Leeds I shall be glad to waite on you any Week or day from your Humble Servt Huddersfield Jany 22, 1793. Christopher Brooke

Sir please to direct to Chris<sup>r</sup> Brook Clifton to be Left with M<sup>r</sup> James Harrop.

20 RICHARD OVEREND to BENJAMIN GOTT,

Scholes, 22 Genery, 1793.

Sir I rite A few Lines to Put you in mind consarning them Cards and Prises we was Talking About when I was at warehouse And I hope you will Let me have A Chance With my Neighber

¹ Proprietors of the Bowling Ironworks, near Bradford, established in 1784. In 1788 they commenced to smelt iron ore. See also Gott's letter about the firm [No. 60] and Professor Heaton's article above.

Cardmakers as I will make you them as Good Goods as Aney other man[.] I should have Come over to Day But am Put of[.] I shall come over this week[;] if you have aney thing to send Please to send A Line by the Bearer Joseph Hepworth from Your humble Sarvant at Comand Richard overend Cardmaker at Scholes near Cleck heaton.

## 21 WILLIAM PRESTON & Co to W. F. & G.,

London, 25 January, 1793.

Agreeable to your desireable commands you'll herewith receive Samples of Madder & Cochineal, prices as under, if any other sorts be wanted point them out & they shall be sent, your answer we request as speedy as possible—Cochineal to all appearances will be higher in consequence of a now more probable prospect of our tak<sup>g</sup> an active part of humbling the unboundless unprincipled ambition & plunder of the French, more particular in consequence of their late horid destruction of Louis the 16<sup>th</sup>, Your commands we shall carefully attend and remain with much esteem.

```
3 Casks of Madder of the year 1790 @ 43^s/a C**t 2 ,, of ,, — ,, 1788 @ 47/ 2 ,, of ,, — ,, 1790 @ 53/ 3 ,, of ,, — ,, 1789 @ 70^s/ 2 ,, of ,, — ,, 1790 @ 72^s/ 2 ,, of ,, — ,, 1790 @ 92^s/ 2 ,, of ,, — ,, 1790 @ 92^s/ 2 ,, of ,, — ,, 1790 @ 92^s/ 2 ,, of ,, — ,, ,, @ 95/ One Sample of 2 Bags of about 100 lb each at 13^s/3^d a lb two Bags of 200^{1b} nt wt each @ 13/6 a lb one Bag of d^o at 14^s/a lb
```

With the Madder 6 Months Credit, Cochineal our Commission of  $\mathbf{P}^{\mathbf{r}}$  C<sup>t</sup> to be added allow<sup>g</sup> a dis<sup>t</sup> of  $2\frac{1}{2}$  P<sup>r</sup> C<sup>t</sup> and to be included Interest on the remittances. Will<sup>m</sup> Preston & C<sup>o</sup>.

## 22 HIRD JARRATT DAWSON & HARDY to W. F. & G.,

Low Moor, 5 February, 1793.

The Pan which we promised to send you to day is ready to come & would have been sent according to promise but when it is come out of the Pit there is a blemish upon it with which, were you not made acquainted with it, you might perhaps be displeased. We wish therefore you would be so obliging as to send your Servant over to look at it, that before it comes he may see whether there can be any reasonable objection made to it. As we wish to send you nothing but what is perfect & notwithstand we believe the pan in question will not at all be injured by the little misfortune that has happened to it, yet we would not send it without your approbation. You will oblige us therefore by sending your Servant to inspect it as soon as possible. Another will be ready in the Course of a few Days.

[P.S.] By the Bearer you will receive 45 Bearers 21.2.6

<sup>1</sup> The Proprietors of the famous Low Moor Ironworks, near Bradford, later known as the Low Moor Company.

```
23 List of Payments, in handwriting of Benjamin Gott.
                                                     To 27 February, 1793.
                    at 16 per Ton
5 Ton of Allum
  Freight on Do
                                                     Jonas Brown paid
  Hurrying Do | not paid
                                                 6 paid
3 Bottles if not re-
turned £6 16s. Rawson
24 Bottles Aqua Fortis 2449 at 6d
                                        61
                                            4
                                         16 13
10 D oil of vitriol 1333 at 3
                                                     turned £6 16s.
Cwt
4 Grain Tin at 131/- p. Ct
  Shipg Ex. & Cask 4/-
                                                    Townend & Compton paid
  Freight from Hull & Expenses
                  q lb
               С
                     24 Gr. Madder
N. 5 & Cask
             IO
                   3
                     25 Tare
                   3
                     27 Net at 52/- 25 19 61 at 2 mos from 27 Feb 1793
                                       of Read & Son.
Stone
180 fine Honduras Logwood at 9/6
                                         85 10
                                                129 15 Gledhill query the
                               at 11/-
60 Peachwood -
                                         33
20 Yo [i.e. young] Fustick
                               at 11/3
                                        II
Tons
10 Barwood
                                  9
                                         90
10 best Cuba Fustic
                                                 £
                                                       Gledhill at
                                  IO
                                         10
2 Superfine Peach Wood
                                                 260
                                                      12 Mos 29X bre 1792
                                  22
                                         44
2 Saunders
                                  13
                                         26
Stone
                                 28/2<sup>d</sup> 26 - Paid for in 1792
240 Woulds
                        c q lb oz
                                 neat 187 12 at 15/6 with carr
N<sub>3</sub> I Bag Cochineal
                        I 2 2I
                                                         145 IO I
                                      advance
                                      3<sup>d</sup> p<sup>r</sup> lb. 2 · 7 · 8
                          q lb oz
N<sub>17</sub> I Bag Cochineal
                        1 3 16 13
                             I 6 Tare
                               211 lb. 7 oz. at 15/3 161 4 5 Carr<sup>r</sup> Charges 3<sup>d</sup> p<sup>r</sup> lb. 2 12 6 Do
N<sub>I</sub> I Chest Indigo
                        5 2 24
                          3 8 Tare
                        4 3 16
                             21 Trett<sup>1</sup>
                                    527 [lb] Net 7/10
                                               at
                                     Carrige &c. 3\frac{1}{2} p. lb.
N72 Cask of Madder 10 3 10
                                                       Per Water
                             4 Dft<sup>2</sup>
                       10 3 6
                          3 24 Tare 10lb. p. Ct
                        9 3 I Net at 95 s.p. C<sup>t</sup>
                                                                      G.W.F.
                                                         46 14
```

<sup>&</sup>lt;sup>1</sup> Trett. TRET, an allowance of 4 lb. in 104 lb. on goods sold by weight after the deduction for tare (O.E.D.).

<sup>&</sup>lt;sup>2</sup> Dft = Draft or draught, an allowance for waste.

John Rennie¹ to W. F. & G., London, 26 March, 1793.  $\rm M^r$  Griffin has at last agreed to take the 3 Millstones on his wharf & to ship them on Board Captain Scott's vessel for £2.5—

which I have agreed he shall be paid.

This night will be sent p. the Mail Coach a Tin Case containing 3 Plans for your wood machinery<sup>2</sup>—which are the best I could contrive under your circumstances & I hope they will be found to suit your Purpose—Not having a proper Section of the Engine house I could not well adapt the Pump for supplying the works to it But have represented where it should be & if you

<sup>&</sup>lt;sup>1</sup> John Rennie, the great engineer, worked in close co-operation with Boulton and Watt. In March, 1783, Rennie paid his first visit to their works at Soho, at a most critical time in the history of the steam engine. Watt "was gratified to learn the extent and accuracy of his [visitor's] information." From that time onwards Rennie had close personal intercourse with Boulton and Watt. He was a personal friend of Benjamin Gott, who had a bust of Rennie at Armley. Rennie designed Wellington Bridge adjacent to Bean Ing, of which Benjamin Gott laid the foundation stone in 1818. [Smiles' Lives of the Engineers: Smeaton and Rennie, 1904, pp. 257–62.] His son George Rennie (1791–1866) was also a correspondent of Benjamin Gott.

<sup>&</sup>lt;sup>2</sup> The machinery for turning the stones for grinding the dyewoods. The original "Plan of the Engine & Wood Machinery" signed by John Rennie, March 26, 1793, is now in the Engineering Department of the University of Leeds. It names the Rasping Mill, the Chiping Mill and the Wood Stones.

[desire] any further drawings by sending that of the Engine house I shall adapt the Pump thereto

On the other side is an acct of the Millstone\*—

\* This half is missing.

T. IRVIN & JAMES HAIGH Assignees for Chas Dyson to W. F. & G., 25 Halifax, I April, 1793.

We have recd yours enclosing a Bill for Twenty Pounds 138/ which is right for the 2 Pans &c.

John Southern for Boulton & Watt to W. F. & G., Soho, Birmingham, 17 April, 1793. 26

Boulton & Watt Foundry Letter Book, 158.

Presuming that the interval, since our last correspondence upon the subject, has been sufficient to enable you to make up your minds respecting the mode of payment of the premium for the engine, we now take the liberty to request you will favour us with the result together with your names residence &c. &c. proper to appear in the deed, and the place of erection, as also the general purposes to which the engine will be applied, from which we will get a copy of the articles of agreem<sup>t</sup> made out, engrossed & executed &c. &c.

[P.S.] Ye Engine will be sent off we expect in the course of next The rotative shafts are turning it as soon as they are fitted[;] will with the whole else be sent off.

F. Wheeler to W. F. & G., Road, Trowbridge, I May, 1793. Sr the Stock and Harness is waiting in Bristol for Carriage 27 in Barlows Warehouse, there is no Vessle passes scarce once a year from Bristol to Hull, it will be taken to Stourport, how near you I know not, my Son was at Bristol yesterday and was Informd it

would be taken of Monday or Tuesday next,-

This Stock must Stand by the face Center line A perpendicular, his Bracs must be four feet eight inches long, his Ground work or Spur must Stand About nine Inches under Center, the Back of him may lean Back one inch in its length or A perpendicular,—the feet must fall from the top of the fender to the height the Tapet rises them, two feet Seven inches or seven and a half, he will work no pace with less fall, hath given you our names to every Article on Old Cards fastned to it, I hath Inclosd Barlows hand Bill, the harness when hung in must be hung verry Creese,1 or it will wrap or Cut its goods, it will Mill about forty yards of Our Superfine Broad Cloth, or Thirty five yards of Second goods, down to Seventeen yards, I hope you will make it out to Answer but am very doubtfull of it, if any farther Information shall be wanted inform me what, I shall be ready to Asist you by letter

<sup>&</sup>lt;sup>1</sup> Creeze, adj., a Somerset dialect word meaning careful, particular.

Extracts from Letters in the Boulton & Watt MSS., 28 Birmingham.

(a) JOHN SOUTHERN to JAMES LAWSON (at Leeds),

Soho, 13th May, 1793.

"I have this morning got yours of 10th. The drawings for Mess. W. F. & G. boiler steam pipe was sent to them long ago (in Jany) and we were to make only the double stop pipe. Since then we think the boilers have been altered in situation & the patterns had better be made to suit it. We shall only send the double stop pipe which with all the rest of the goods will be sent this very week, & I am very angry that they have not been sent before as they have been ready several weeks. I do not know where the blame lies.—The Gentlemen have not yet sent about the premium,—could not you ask in the course of as if nothing had happened whether they had sent to us on that subject?—This as you think proper...

James Lawson to John Southern, Leeds, 13 May, 1793. ".. I wish you would give me the particulars of any alteration made in the steam pipes for Mess<sup>r</sup> W. F. & G. in consequence of their being placed at the end of the engine house—if the stop pipe & part that joins it are cast. I should think by turning the Stop Pipe so¹ would be the readiest way—of this you will inform me, that the steam pipes may be ordered—I am happy to be able to inform you that at Leeds they hope things are at the worst.."

(c) JOHN SOUTHERN to JAMES LAWSON (at Leeds),

Soho, 16th May, 1793.

".. On account of the double stop pipe of Mess. W. F. & Gott being sent off, I think the pipes may be conveniently made as under<sup>1</sup>—you will observe that its 3 ends are not all of one diam: the two opposite ones being 8 inches and the side one 7 to go to the Cylinder—but you will judge of the best, & a new stop pipe had better be made than much inconvenience occur by using the present one.."

(d) JOHN SOUTHERN to JAMES LAWSON (at Leeds),

Soho, 19 July, 1793.

".. Request Mr. Gott will inform you (with B & W's comps) which mode of payment of the premium they determine upon, as we must have the agreem<sup>t</sup> put forward ..."

JOHN SOUTHERN to JAMES LAWSON (at Leeds),

Soho, 26th July, 1793.

".. Smallman wrote us a letter which came to hand yester-day saying he should be with you the end of the present week. I suppose by this time therefore he is not far from you. We intend to send B. Firth as soon as he is at liberty, but we expect to have

<sup>&</sup>lt;sup>1</sup> A sketch shows the proposed arrangement.

occasion for Smallman very soon & he must be set at liberty when we want him—we cannot pretend to furnish 2 men to every engine, & when he leaves if W. F. & G. are in much haste one from Cookson's may be spared, as I suppose they are not in much haste.

We heare nothing about W. F. & G's premium—if I do not hear something by this day week, I shall give them a line direct, which perhaps you would prefer if you have already been trouble-some that way, understand you?"

JOHN RENNIE to W. F. & G., London, 27 May, 1793. 29

On the other side you have my account for copying Mr Sutclifs drawings¹ & for designing the machinery of your proposed wood mill—amounting in all to £29. 18. 6—The charge for the wood mill is much higher than it would have otherwise been owing to the trouble of adapting it to your other works which have not been so well planned as [they] should have been to render the whole a compleat job—I sent to Griffins wharf on Saturday to pay the wharfage—but was informed it had been payed by the Master of the vessel that took the Stones—You may be assured I will not pass through Leeds without doing myself the pleasure of waiting on you & I shall most readily assist you with any advice I can give to enable you to compleat your machinery.

JOHN RENNIE to W. F. & G., 30 London, 31 May, 1793.

I was this day favoured with yours of the 29<sup>th</sup> Inclosing a Bill for £29. 18. 6 for which I beg you will accept of my best thanks—You payed Me amply for My Opinion respecting Sutcliff's drawings & therefore I have no farther claim at present against you.

Receipt by Thomas Raddings<sup>2</sup> from W. F. & G., 5 June, 1793. 31 In Benjamin Gott's handwriting (except the signature).

Leeds 5 June 1793. Recd of Messrs Wormald Fountaine & Gott the Sum of Twenty eight Pounds 13/9 for Freight of Goods from Birmingham to Leeds as understated—as Witness my Hand Thos Raddings.

Joseph Nell's Vessel from Birmingham to Gainsbro	16	6	2
From Gainsbro' to Leeds	12	7	7
Going up River to Bean Ing	£28	13	
	£29	4	3

<sup>&</sup>lt;sup>1</sup> See letter No. 58.

<sup>&</sup>lt;sup>2</sup> Thos. Raddings appears again later in the year as the agent or shipper at Gainsboro' who was forwarding thence to Leeds the material despatched from Soho. See Lawson's letter, No. 48.

Similar accounts for freight of machinery are contained in the parcel relating to the building of Bean Ing, e.g.:

32 Joshua Goldthorp to W. F. & G.,

Clifton [Brighouse], 20 August, 1793.

I have sent cards by Mitchels for a Scribler and Carder, of Wrights and Whites making which doubt not of them giving particular satisfaction, and shall bring the Bill of Parcels as I shall be at your Mill when they are set on, I have made every thing as complete as Possible.

33 JOHN SOUTHERN for BOULTON & WATT to W. F. & G.,

Soho, Birmingham, 27 August, 1793.

Boulton & Watt Foundry Letter Book, 182.

 $M^r$  Lawson wrote us ten or fourteen days ago relating the premium for your engine, saying that you seemed inclined to pay the gross sum rather than the annuity provided a deduction were made in consideration of the engine's not being set to work so soon as was expected. We calculated the engine to be set to work in June, but that not being the case, we propose to lower the gross sum to £960 which is the sum our rule gives for the premium under the present circumstances.

34 WILLIAM PRESTON & Co to W. F. & G.,

London, 12 September, 1793.

We have this day rec'd Seven Hundred forty nine pounds 12/11—which is the full Ballance of your Acct: save and except Interest which we will furnish you an Account of pr: first opportunity.

Your favour of the 9 Ins. I Duly received—and shall very easaly rumove your Surprise respecting the Comparetive prises of 1792 & the present year by submiting the prises as pr C extra for your perusal which I obtaind agreeable to the date annexd therto, but were Sold a very Short time after considerably higher & the prises I have given you I sold 33 packs at present Money so late as the 11th Day of August last past—the Two fine Sorts only excepted of which indeed I sold nine and as we are in very great hopes of Trade getting better, cannot at present think of Selling it lower—that is to say no great Quantity. but yet shoud not wish to confine you so as you were not inabled to sell it, as that wuld answer no good end; therfore will take off 10/ upon No 4 Super & 20/ upon No 5 Choice for the present only. the other Sorts cannot abate anything of—& those must be considered as Ready Money Prises[;] that is to say, a good bill at 2 Ms. as we always pay ready money

Aug. 17th Messrs	Wormhill, Fountain & Gott	to John Hall		
	tings &c charg'd at Gainsbro'	13		
freight to Le		6 15	0	
To I Pack of Fethers charg'd at Gainsbro'				
freight to Le	eds	3	6	
1793 Aug. 23.	Settled the above J.H.	7 14	0	

down for every Shillingsworth we take in, the Growers being a peeople that gives no Credit—& if I say I will allow for Commission Covering bad Debts & 5/ upon & for every pack sold: under & ammounting to 15£ & 7/6 p<sup>r</sup> pack for every pack sold above 15£ & upward[,] hope it will be thought equivalent to any trouble attending such Sale. you will recolet the prises already sent you do not include Sheets or Carridge.¹

24 Nov 1793 [B. Gott in red ink adds 'shd be '92'].

Liverey	10	0	Ο,	
Abb.	12	5		and they were chiefly Sold to a London
Seconds	13	15	0	Stapler & of coarse worth more & not less
Dowts	15	10	0	than from 10 to 20/ pr pk and I do assure
Head	17	15	0	you I sh[ould] not like to sell all my sorts
Super	22	10		[at the] prises sent to you as we can[not]
Choice	26	0		get above one half of the Growers to Sell.
Prime	33	0	0	1 -

36 Extracts from Letters in the Boulton & Watt MSS.,

Birmingham.

John Southern to James Lawson, Soho, 21 Sepr, 1793. "... From your former letter we understand Messrs Wormald (f)Fountain & Gott propose to pay a gross sum in lieu of the annuity, that they propose to leave the sum unsettled in the agreement which will make the agreement invalid—We shall therefore send them a copy of the agreement supposing the premium as last fixt—and insert Jnº Wormald Esqr as the counter party. In regard to the sum the last mentioned is the lowest that can be accepted and we hope no further delay will be put to the progress of the indentures, as they have been procrastinated to an uncommon time...

"If the locks you have ordered for Mess. W. F. & G. are stock locks they can make them very good ones but if for bettermost doors they cannot be made for that price nor any good ones for less

than 10/- a 100..
"We send by this post Copy of the agreement to Mess.

W. F. & G...''

JOHN SOUTHERN to JAMES LAWSON, Soho, 19 Octor, 1793.
".. In relation to Mess. W. F. & G's air pump it is ordered 5 feet 5 inches long—the bottom of the opening inside from the top is 9 inches—leaves 4,, 8—the bottom opening & thickness of bottom 7 inches leaves 4,, 1—bucket 7 inches leaves 3 feet 6 inches the stroke—and the bucket may go a full inch below the bottom opening, and a full half inch above the top opening, making an

<sup>1</sup> The schedule reveals what the letter does not—that the writer was offering wool. The qualities into which it was graded by the wool-sorter, as here named, were those customary at the time, the lowest priced being 'livery,' whilst 'dowts' is written for 'downrights.' Both the letter and Gott's note show that the prices quoted were those ruling on 24 Nov., 1792. Weak spelling and composition make the letter difficult to follow, but it is none the less an interesting business document. The writer was a wool dealer or broker, living at Uxbridge, just in Middlesex, and probably drawing his supplies mainly from the Chilterns. He appears to regard his correspondent his supplies mainly from the Chilterns. He appears to regard his correspondent as a wool merchant, not as a manufacturer.

extra space of  $1\frac{1}{2}$  inches, & which corresponds in the cylinder to full 3 inches. I wish you would measure this and inform me wherein

it differs, or in what respect it is wrong.."

".. Can you take any more notice about the agreement with Mess<sup>r</sup>: W. F. & G. or would you prefer it done by a letter from hence? As we have heard nothing from them since we wrote last which is a month ago—it was the copy of the agreement that we sent.."

(h) John Southern to James Lawson, Soho, 26 Nov<sup>r</sup>, 1793. ".. This is principally to request you will return us Mess<sup>rs</sup> Walker's agreements properly filled up—and say wheth<sup>r</sup>: you wish us to write to Mess<sup>rs</sup> W. F. & G. about theirs or you to speak to them as there can be no just obstacle that we see to its coming near a conclusion."

On Receiving A Letter from Mr Foster to make Three Carding Engines for you the same as his and one of your Letters orders them to be made Double the same as Mr Fosters I expected you had settled upon that Plan and as I writ you Last we had Begun to Forward them accordingly. But if you Chuse we Can Send You Two Single and Two Double ones. Robt Told Me that Mr Thompson and W Walker advised you to Have single Machines. But in the Letter that you sent by Him you Did not mention them being made single and your Former Letter ordred them made double as well as that I Recd from Mr Foster. Therefore I Concluded You certainly ment them to be so and have begun Two of them on that Plan. I can Asure you there Is no Better Engines any where than those We made for Mr Foster. But some will Recomend one Plan and some Another, and the[y] Both answer. But Double Engines seem to Have a Preferance In General. Nevertheless most People Have Both sorts in order to sattisfy themselves By Experiment.

If I do not Hear from you to the contrary I mean to make

Two of Each Sort and send Cards For them.

Shoud you be in want of a person to superintend your spinning machinery [I] take this opportunity of offering my service[;] doubt not but coud give satisfaction as I am perfectly aquainted with that branch of manufactory[;] have been in practice thus seventeen years[;] likewise perfectly understands the slubing part upon Billies[.] have a Family of six Children[,] some of them are qualified to attend upon the Billies[,] to what we call pieceing Cardings[.] likewise have an Apprentice who is a very Good Weaver[.] Should you be in Want of a person in the above situation woud be Glad to serve you[.] have been Accustomd to the very best quality of Work in our Neighberhood[.] can produce an undeniable Charcter—a line from you if agreeable will be duly attended to.

39 HIRD JARRATT DAWSON & Co to W. F. & G.,

[Low Moor], Bradford, 4 October, 1793.

We are duly favoured with yours covering two Bills Value together £265.9. o—which is entred to your credit with thanks.

40 HIRD, JARRATT, DAWSON & HARDY to W. F. & G.,

Low Moor, 9 October, 1793.

We have this day rec: d your favour inclosing four Bills value £90. 12s. which we have passed to your Credit & by making the allowance of £7. 11s. it closes your account. As we have, to oblige you, made the above allowance we trust you will think of us when you are in want of any more Castings of any kind.

41 Samuel Fripp & Co to W. F. & G., Bristol, 19 October, 1793. We have receiv'd your esteem'd favour of the 16<sup>th</sup> ins<sup>t</sup>: encloseing y<sup>r</sup> drf<sup>t</sup> for Twenty One Pounds Sixteen Shillings which is applied to your Credit with Disco:<sup>t</sup> for the Amo:<sup>t</sup> of 1 Cask Oil Soap. Hope the same will speedily arrive & prove satisfactory.

42 Bill. Due to Benjamin Horsfall [Halifax] from W. F. & G., 8 November, 1793.

Nov 8<sup>th</sup> 93 Fountain Wormald & Gott to Benj<sup>n</sup> Horsfall
April 23<sup>th</sup> to 1 pan Leading From Halifax to Leeds .. 2 2
to 6 Engions Leading at £1 15s. Each .. 10 10

12 12 0

[In Benjamin Gott's hand] 1793 Nov. 9 Settled the above Benja Horsfall

43 Jonas Brown to Gott & Company,

Hull, 18 November, 1793.

I am indebted to a correspondent at your place for favouring me with your address, & in consequence of his recommendation I take the liberty to acquaint you that I have lately imported a quantity of Russian Pot Ashes, in Casks of about 8 Cwt each, which I am selling at 28s/- pr Cwt—Tare 14 lb pr Cwt—Draught 2 lbs pr Cask, payable by Bills at 3 Months date. Those who have made trial of them say they are of a very fine quality.

Being informed you make use of this article in your manufactory, if you should want a supply, & please to favour me with an order, I shall be happy to serve you on the above terms, & for any quantity from 5 up to 20 Tons, (to which the wholesale trade is limited) I make an abatement of 1s/6d pr Cwt from the retail

price of 28/-.

44 Bill. THOMAS WALKER bought of HARDY & Moss,

27 November, 1793.

Mr Thomas Walker Bought of Hardy & Moss

1793 Nov<sup>r</sup> 27<sup>th</sup>. To 2-40 Spindle Jenneys of Best Sort ... 12 2

for Carriage of 2 Jenneys to Leeds .. I I o N.B. Man and Horses to have bait & a Nights Lodging at fur end. 45 Estimate submitted by Jopson & Taylor, Rochdale. No date. Scribling Engine fi pr Inch length of Cilinder. Carding do. same price.

Billy with 40 Spindles for Spining to the Length. I Do for Slubing 30 Spindles IO IO Single Carding Engine 16/- p. Inch.

46 Invoice from Fennel & Hainsworth,

London, 2 December, 1793.

Messrs Fennel & Hainworth. To James Sutton & Co.

2 Bags Cochineal I 10 [In B. Gott's hand.] M II: 8 I 6 recv'd a regular Invoice for N° 14 from Fennell & Hainsworth Ι 2 21 **I4**: 3 2 21 3 00 3 410 [lbs.] at 14/3 £292 2 6 2 18

J. RATCLIFFE for SMITH & Co to W. F. & G.,

Chesterfield, Griffin Foundry, 3 December, 1793.
Your favor of the 2<sup>nd</sup> Instant came duly to hand covering three Bills value Three hundred & Fourteen pounds 8/2 to the Credit of Your Account—and for which you have our thanks.

James Lawson to Benjamin Gott, Retford, 9 December, 1793. I duly recd yours & last night went to Gainsbro' & this morg saw Mr Capes—who informs me that 2 Boxes & 8 bundles of Iron work were sent pr Thos Radings for Leeds on Saturday last & will get them on Wednesday night or Thursday moig.

He says they only came there on Saturday & were imediatly reshipped—finding a little more to do than I expected I shall not

be able to be at Leeds before Wednesday morg. N.B. I thank you for sending the two letters.

49 Agreement between John Jubb and Benjamin Gott,

[Condensed.] 12 Dec<sup>r</sup>, 1793.

An Agreement made between John Jubb of Leeds Millwright of the one Part and Benjamin Gott of the same place Merchant of the other Part. Witnesseth that the said John Jubb doth hereby agree to make complete and finish in a workmanlike manner two Machines or Things called Willies and deliver and fix the same in the Building at Bean Ing near Leeds aforesaid belonging to Benjamin Gott on or before the 23<sup>rd</sup> December instant.—In Consideration whereof the said Benjamin Gott doth hereby agree to pay unto John Jubb £31.10.0 for each of the said Machines or Things. Provided nevertheless that in Case John Jubb do not finish the said Machines or Things on or before the Time aforesaid Benjamin Gott shall not be obliged to take or pay for the same.

Witness the Hands of the said Parties the Day and Year

first above written.—

Witness—Joseph Watson. John Jubb. Benjamin Gott. 50 Extracts from Letters in the BOULTON & WATT MSS., Birmingham.

(i) John Southern to James Lawson (at Leeds),

Soho, 26<sup>th</sup> Dec<sup>r</sup>, 1793. ".. We are glad to hear of your success in setting Mess<sup>rs</sup> W. F. & G's engine one (sic). Why any set of men should doubt that a machine which works a cotton mill should not also work a fulling mill, when they know perfectly that they are both capable of being wrought by a waterwheel, is to me truly astonishing; because it is demonstrable upon the simplest principles of analogy and therefore to the meanest understanding; and can it be that the Clothiers—the Gentlemen Clothiers—are destitute of even common understanding? Incredible!

"How does your Antiretrograde Machine do? is it up? In regard to the agreement, it shall be drawn up immediately & by order of B. & W. in the usual terms for premium in annuity, & the gentlemen may at any time commute it for a gross sum. B. & W. cannot help being surprised at the procrastination of Mess. W. F. & G. in relation to this affair till the moment the engine was set to work, which is not customary with Gentlemen of their reputation; and it cannot be expected that they will at the end of half a year make much difference if any in the gross sum—as the said sum was calculated low to include all risks which of course will diminish as the term shortens. By "the clothiers being set against them" do you mean the Master clothers (sic) or are the common workmen called clothiers?"

- (/) John Southern to James Lawson, Soho, 10<sup>th</sup> Jan<sup>r</sup>, 1794. ".. Do you mean that W. F. & G. have not yet commenced effective work so that the premium may commence? and that you expect that may be the case next week? Yr ansr & also when they or any other begin you will please to inform us.."
- (k) John Southern to James Lawson, Soho, 23<sup>d</sup> Janry, 1794. "... I am very glad to hear of your successful commencet: with W. F. & G.—we sent their Agreem<sup>t</sup> by last coach.."
- (l) John Southern to James Lawson, Soho, 28th April, 1794.

  ".. The present is to acquaint you that a Letter is this morning received from Mess<sup>rs</sup> W. F. & G. desiring us to send a pump which they say you ordered here 6 weeks ago. I have looked over all your letters for [it] twice that time & more, but I find not any order for other pumps than the air dampers which have been long sent off. They say the water from the injection well is of so sharp a nature that it does not answer the purpose of their works, which they must get supplied from the river, & I understand this pump is for s<sup>d</sup> purpose. We beg your immediate answer saying what size it should be and whether any & what plain pipes are to be sent—We write to Mess<sup>rs</sup> W. F. & G. to say that every attention

shall be paid to their order that lies in our power at this place without saying that we have had no orders for it, and therefore leave it to you, if you think we cannot send it time enough, to get it at Rotherham, Leeds, or where you think best & to make the best excuse you can for what appears like negligence in us..."

51 WILLIAM FORMAN for BOULTON & WATT to W. F. & G.,

	S	oho, 22	Tai	ıУ.	179	4.
ess <sup>rs</sup> Wormald, Fountain & Gott.		Boulton				
2 of Miles's patent Lanterns				£o	12	_
4 Lamps		1/4			5	4
6 Japan'd O.G. Lamps with Racks & pir	nions	12/6		* 3	15	
2 Do Rod Lamps with Do Do & Shades		20/-		* 2		
6 Extra Glasses to the above		$\cdots$ 5 <sup>d</sup>			2	6
6 Doz: Wicks to Do ·		84			4	
Box	• •	• •	• •		2	6
* D' + DO+ ( -				7	I	4
* Disc <sup>t</sup> 15 PC <sup>t</sup> on £5 15					17	3

The above are now lying here packed and shall be sent to-morrow p<sup>r</sup> Swaine & Andertons Waggon. There yet remains of M<sup>r</sup> Lawson's Order for you, to be sent. 2 Wall Lamps & I Rod one which you may depend upon our sending as soon as we can get them.

52 Samuel Fortune to W. F. & G., Halifax, 3 February, 1794. Staffords house Feby 3<sup>th</sup> 1794.

We sent the iron wheel of on Saturday by Jonathan Willson Carrer of Stanninley and we shall send billey and plucker and the willy on Thursday and cume with them to set them up. As we do not cast for our self we shall put wood bends to carrey the roulers and the price of the Duble one £53 and the Single one £39 and the 30 Inch Carder Single Engine £26.

[P.S.] this day we received your letter and if we make them we will deliver one in 3 weeks and the other as soon as possible. your

answer by Post.

Me

Thomas Leeming to W. F. & G., Salford, I February, 1794.

Rec<sup>d</sup> From Tho<sup>s</sup> Leeming one Billy 30 spindles to be Forwarded with speeds to Mess<sup>rs</sup> Wormet Fountain Gott & C<sup>o</sup> Leeds.

[Signed in different handwriting] Jn<sup>o</sup> Pickersgill Carrier.

Gent<sup>n</sup> The Above is this day sent and the [Carrier] Will Take another To-morrow. We are Forwarding the other Two.

Tho<sup>s</sup> Leeming.

54 MASON & Rd Scott to W. F. & G., Shrewsbury, 11 March, 1794.

Annex'd you have Invoice of 32 Pks which we have forwarded to the care of Worthington & Gilbert Manchester & doubt not but

<sup>&</sup>lt;sup>1</sup> Plucker—a machine for mixing wool previous to scribbling.—E.D.D.

you will approve of the Quality—we have given a strict charge that there be no delay in the delivery of this Wool[.] shou'd it not arrive in due course we will trouble you to drop us a Line—we have been oblig'd to omit 2 P[ks] of 7<sup>th</sup> wool but w<sup>ch</sup> we will forward as soo[n] as possible—the wools we break being almost intirely the prime fleeces of our own County & Herefordshire we make proportionally but little of the low sorts.

### FENNELL & HAINWORTH to W. F. & G.,

London, 12 March, 1794. Annex'd we hand you Invoice of a Bag of Cochineal which is the best we could meet with in the trade & we have no doubt it will meet your approbation, which will give [us] pleasure and we hope induce the repetition of your favours.

BENJAMIN GOTT to JAMES LAWSON, [Leeds] 6 April, 1795. Boulton & Watt MSS., Birmingham.

Dr Sir, I have this moment ye agreeable account of Mr Lee's perfect recovery—why could not you prevail upon him to accompany you to Soho: no medicine is equal to ye company of friends—

Mrs Gott's health in which you do us the favor to take interest yourself is daily improving—In a few days she purposes to avail herself of ye advantage of her native air.—I thank you for Fourcroy's1 explann of ye new Nomenclr—it is one of ye clearest books I have seen.—sh<sup>d</sup> you go to London inform me—that I may take y<sup>e</sup> advantage of your judgement in any purchase I want—I hope your Box arrived safe & ye Blue top Coat.—The Main pipe for boiling ye Water has been cleared but it does not perform more speedily than when you was present—I presume ye expann of steam fm ye increasd diamr: of ye tube is one disadvantage to ye experiment.—Present me with best compliments to all friends at Soho & believe me always Yours B. Gott.

Leeds, 20 May, 1795. BENJAMIN GOTT to JAMES LAWSON,

Boulton & Watt MSS., Birmingham.

I take ve opportunity of your return to Soho to request you will put up ye: new rules for ye Sick & Hurt Workmen's fund of ye Manufacy—When I had the pleasure of seeing Mr Boulton they were undergoing a revision which induced me to defer establishing our society—Be so good as put up a considerable Stock of Cotton Wicks for ye Patent Lamps and we will repay you their cost.—I need not remind you of ye indicator—Mr Lee informs me ye Joint of ye Iron Case to ye Cylinder does not stand so well as at first he expected. I defer ye casting of ours till you reach Leeds—I beg you will send me by Coach a pair of very fashble Patent Buckles—I have given mine & am in immediate want of a pair.—These I shall repay you

<sup>&</sup>lt;sup>1</sup> Fourcroy, Antoine François, Comte de, 1755–1809. The book referred to must be:— The philosophy of chemistry, or fundamental truths of modern chemical science, arranged in a new order. Tr. from the French of the second edition. 8°, London, 1795.

for when we meet.—I am told ye polishing of Mr Lee's Cylinder answers admirably—if we continue to add to our Weight of Machinery we shall soon have occasion to apply every improvement—our fireman now complains of ye difficulty of keeping up ye Steam[.] ye engine keeps it[s] proper Speed & ye pres<sup>re</sup> about 9 to 10 lb. certainly not 11<sup>lb</sup>—I shall be glad to hear from you & if anything new has occur<sup>d</sup> in ye mode of Polishing ye Cylinder do not omit to inform Your friend & ob<sup>t</sup> Servant B. Gott.

BENJAMIN GOTT to JAMES LAWSON, 58 Leeds, 2 July, 1795.

Boulton & Watt MSS., Birmingham.

The Commissioners of the Leeds Water Works of which number I am one have rec<sup>d</sup> a charge from John Sutcliff of upwards of Two Hundred pounds for attendance &c—which ye commissioners object to pay as an imposition & that ye work was very improperly executed as ye explanation by the enclosed will sufficiently shew may I request the favor of your consult with Mr Rennie if he be in London of a proper person as an Engineer to examine into the Work done & give his opinion of the justice of Sffe's charge & whether it be proper to pay the money or resist it in a trial at ye County Assizes on the 18 Inst.—it is requisite the Gentleman should have time to give evidence at the Assizes if necessary to support his opinion[;] if I recollect[,] Mr Rennie mention<sup>d</sup> a Gentleman who has the direction of one of ye Waterworks near London—it was not Mr Milne—but a person of considerable imployment & ability—I beg the favor of an Answer in course of Post—Mr Lee & 2 Miss Lees have been on a visit 2 Days & are setting out for Harrogate—Mr Lee has a great number of experimts & much other information for you which you will probably receive from Harrogate.

I have only to regret that your engagements in London will so long deprive us of your Company at Leeds believe me very truly

I have sent ye outlines of ye Waterpipes & minutes made by W. Cookson Esqre to Mr Rennie by this post—& have also Directed your Letter under Cover to him—if Mr R. be out of town you can Identify the Letter from me which please open & give me your reply to by the first Post.

BENJAMIN GOTT to JAMES LAWSON, Boulton & Watt MSS., Birmingham. 59 Leeds, 11 July, 1795.

I have only just time to thank you for a Letter & to request you will do me the favor to call upon Mr Foulds at the London Bridge Water Works & second a Letter addressed to him pr this post requesting he will do us the favor to attend at Leeds not later than Friday or Saturday next[,] ye former Day if possible. Mr Rennie has been so obliging as write to the same effect to Mr Foulds whom ye Commissioners very much depend upon & whom they have to regret ye nature of the business prevented them from give longer notice to—the post going—I shall soon give you ye trouble of another Letter—Yrs always B. Gott. 60 W. F. & G. dr. to W. Barrs, 25 September, 1795. Mess<sup>rs</sup> Wormald Fountaine & C<sup>o</sup> D<sup>r</sup> to W. Barrs, Loughbro.

Credited Octr 5 1795.

Gentlemen. Mr Barrs is always unwilling to return Goods but such a price as the drab plain he cou'd not possibly recommend to a Customer and the Coating is charg'd much too dear—thinking you'd be unwilling to allow the deduction He must necessarily make to sell it—thought twou'd be the best way to return it.

61 Benjamin Gott to James Lawson, Leeds, 13 December, 1795.

Boulton & Watt MSS., Birmingham.

Dear Sir. The names of Mess<sup>rs</sup> Sturges & Co's concern i.e. John Sturges & Co<sup>1</sup> were in June 1793 as under[,] sh<sup>d</sup> it be necessary to enquire further you must tell me—& I will endeavour to answer you—the list below is accurate & I know no one could inform me so well as the Gentleman I rec<sup>1</sup> this acc<sup>1</sup> from & he could not at this time with propriety make further enquiry[;] however if absolutely necessary I will do my best to serve you—

John Sturges Senr-

Elwell—(I could not learn his Xtian name)

Richard Paley John Sturges Jun<sup>r</sup> William Sturges.

in 1793 the 5 Partners in the Iron Foundry at Bowling near Bradford.

The Partners with Mr Paley in the Cottn Mill here I can readily obtain for you if required—I write on Sunday Ev'ning or I wd have anticipated such an enquiry by an answer in this Letter. I am considerably in your debt but you give me no opportunity of discharge it as I do not know the cost of ye bevels or Parl Rul.—I expect ye whole account with ye Air Gun, which I observe you are careful shall be a good one—You inquire after ye Steam Engine—you know a physin can give no good account of ye state of his Patient's health without feele his Pulse & I have no Indicator.

Desire Mess<sup>rs</sup> James Watt & Co to send two of ye improved Copying Machines—such as Mr Southern's—& I hope Mr Southern will do me the favor to point out ye improvements which his penetration may have discovered from ye imperfections of his own—I wd wish such a Case as Southern's to each[,] it was made of Green Cloth—I think these two copying Machines will be the inducement from their Utility to cause many other Commissions.

I anticipate ye pleasure your society will receive at Soho from ye addition of Mr Lee's company this week—I beg to be

<sup>1</sup> Proprietors of the Bowling Iron Works, near Bradford. Professor Heaton supplies the explanation of this letter in his account of "Gott's Relations with Soho," p. 187.

respectfully remembered to such of the party as I have the happiness to be acquainted with who remain

Yours very sincerely B. Gott.

I sho prefer your giving in ye list of names to Messrs B & W to giving up ve letter.

Benjamin Gott to James Lawson, Leeds, 6 January, 1796. Boulton & Watt MSS., Birmingham.

Dear Lawson, I have seen Mr Nicholson who is not employed by the parties you mention & is ready to act or correspond with Mess'rs Boulton & Watt—yourself or Messrs Weston's—as circumstances may require. I thank you for ye attention paid to my different Comns which I expected to have discharged my debt for to you personally ere this—will you call at Ramsden's & examine two Thermometers which he has to send me. I wish them such as mine are which were made by Navin & Blount, in Mahy Cases & to be about 14 In. length of Glass—they are for Messrs Brookes' new Drying House<sup>1</sup>—Ramsden will receive paym<sup>t</sup> of Mess<sup>rs</sup> Welch Rogers & Co & not trouble you on that head. I shall be much obliged by ye Indicator which is an instrument we much want—I find by the enclosd you may be daily expected here—if not please write to me or rather to John Cockshott whose name you will see to the enclosed note. You may recollect ye owner of ye Mill Mr Halliday—who is or was a dissenting Minister—it is a worsted Mill—Mr Nevers² w<sup>d</sup> order an Engine if you was now at Leeds—or at least he will soon order one I have no doubt of about 8 Horse power—B. Gott. I beg my best respects to Mr Rennie & Mr Foulds if you see him.

63	Specification for 40 Horse Engine	21	July, 1796.
	[Hand-writing of Benjamin Gott.]		0 0. 79
	Wormald & Gotts 40 Horse Engine 21 July 96		
	Geer without Machinery 6 [Horses]	6	Horses
	Geer & Rasp 5 Horses	11	
	Do [&] Wood Stones 4 Do	15	
	Do & 2 Pushing Stocks 3	18	$\mathrm{D}^{o}$
	Do & 9 falling Stocks 7		$\mathrm{D}_{o}$
	29 Scribling & Card <sup>g</sup> Engines & 3 Willys 14½		1 D
	Indigo Mill, Winch, &	0 -	-
	Nappg & brusg engines ½ Horse	40	Horses
	July 21 96 B. Go	tt	
	Draft of the same, unsigned.		
	Geer without Machinery 6	6	Horses
	D° & Rasp 5		D.
	D° D° & Stones		75
	Do Do Do & 2 Pushg Stocks 3		$D_0$
	D° D° D° & 9 falling Stocks 7		TO a
	$\mathrm{D^o}$ $\mathrm{D^o}$ $\mathrm{D^o}$ $\mathrm{D^o}$ $\mathrm{A}$	9	
	29 Scribling & Cardg Engines 11½	36	$\frac{1}{2}$ Do
	Do Do Do Do Do & 3 Willys 3		
	Indigo Mill, Frizg Mill &c $\frac{1}{2}$	40	

<sup>&</sup>lt;sup>1</sup> John and Edward Brooke, of Hunslet-lane, merchants, who started a factory about the same time as Gott. The families later became connected

<sup>2</sup> Probably Mr. Pim Nevins, another merchant and manufacturer in

Hunslet-lane, is intended.

64 Particulars of the loss by fire at Bean Ing near Leeds on Sunday the 11th Augt. 1799 the property of Messrs. Wormalds & Gott—Insured in the Sun, & Royal Xchange Offices in the same Proportions.

tions.							
No. of papers refer'd to	in:				Sums Insuthe Sun & Xchange	Joint Loss to both Offices	
		£	S.	d.	£	$\pounds$ s. d.	
	the Buildings Mill &c the Millwright Work & going	3264	17	$3\frac{1}{2}$	3000	3000	
On	the Machinery & moveable	1953	10	6	1000	1000	
	[Utensils	3899	5	6	3000	3000	
3 On 1	the Engine House	223	6	3	400	223 6 3	
4 On	the Engine	285	<u>.</u> —	_	1200	285	
	Stock in the Mill	3920	12	$4\frac{1}{2}$	4000	3920 I2 $4\frac{1}{2}$	
	aving Shops & Warehouse West	5,5		. 2	•	0,0	
	[side the yard				200	-	
Stoc	ck & Utensils therein	48		_	300	48	
	ollen Drying House & Ware-	'			$J_{i}$	1	
	[house coms.			-	300		
Stoo	ck therein	29	15	-	300	29 15 -	
	rkshops & Hot pressing house	3	4.5	_	200	3 14 -	
	ck & Utensils therein	16	-	_	2000	16 11 -	
	ps Wool Warehouse &c. East	10			2000	10 11	
O DIIO	[side the yard	19	тт	TT	200	19 11 11	
7 Stoc	ck & Utensils therein	277		_	2000	277 18 -	
7 500		-//	10				
		13,942	I	10	18,100	11,824 8 6	
Casi	h paid for Extinguishing the	£	S.	d.			
	[Fire	89	8	$-\frac{1}{2}$			
Inn	holders Notes	135	Ι	5			
		224			he Offices of it Viz	allow . 149 12 11	
То	4 Valuers Viz. Jubb, Briggs, Sut	cliffe, &					
Ded	luct for error in carrying moveab	le Uten	sils	(Viz 2	222 Wool	11,982 9 5	
	, J 6				to Stock	36 I 6	
					total	11,946 7 11	
	Sun Fire Office 5973 4 - Royal Xchange Office 5973 3 11						
	,			1194	6 7 11		

65 WILLIAM WILBERFORCE,1

3 May, 1800.

[A rough draft, with revisions, in Wilberforce's handwriting.]
Sir. I feel it my Duty as Chairman of the Wool Committee, to

state to the public, that many of the public papers [or that some of

The letter in the Gott Papers signed by Wilberforce and here printed

the newspapers of the 2nd instant] contain'd a very gross misrepresentation (highly injurious to Mr. Gotts Credit) of a transaction which took place on the preceding day in the Ho. of Commons, a misrepresentation, which it is the more necessary to rectify because the honourable testimony borne by Mr. Pitt to Mr. Gott's Character, which would have completely done away the effect of it, is wholly omitted.

In Justice therefore to Mr. Gott, it becomes necessary for me to state, that Mr. Gott was call'd in at his own desire to correct an error in calculation, and to explain the circumstance from which it arose, in one of the 53 answers made by him to as many Questions on the preceding Day—what followed, will appear most fairly & satisfactorily by inserting the minute of the Committee from the Journals of the House of Commons—

## "Mr. BENJAMIN GOTT:

"The Question and answer in Page 33 being read can you state the Proportion in the increased Use of machinery in that Time?"

"I cannot tell—we have at present 2450 Spindles. I deduct one third for the difference between the Individuals who spun each upon a distinct Spindle and I find the requisite number of persons to do the same Work in a Week, which is now done by thirty five would have required about fifteen years ago, 1634 Persons."

And the Witness having stated "that the Information he had to give on this point was not founded on his own knowledge, but derived from Hearsay the words in his answer from "I cannot tell" were struck out of the Minutes.

Thus far the Journals—It may be proper to state, that the Committee was the rather disposed to strike out this answer of Mr. Gott's (for it was only this single answer that there was any Question about expunging not as was implied in some of the papers the whole of his Evidence) because Mr. Wilberforce had proposed to call in a Witness who having carried on the manufactory before the introduction of machinery as well as since, could speak of his own knowledge to the saving of labour made by machinery (which was the Object of Enquiry), whereas Mr. Gott not having been engag'd in the manufactory till after machinery had come into general use, could only state from ye Information of others, the saving which had been made in consequence of it—after this it is almost unnecessary to add that all Mr. Gott's Evidence, with this single exception, remains in full force on the Journals of Parliament

W Wilberforce

Palace yard May 3d 1800.

appeared in identical terms in the *Times* for May 5, but was headed "Guildhall Coffee House" and signed "John Maitland." Presumably Wilberforce drafted the letter for publication, intending that it should appear to be written by John Maitland, who was the "Chairman of the Wool Committee." The circumstances that called forth the letter are to be found set out in the *Times* on April 30th, and the *Leeds Intelligencer* on May 5th. No doubt it was after reading the report in the latter that Hopps wrote the same day with a heart full of indignation at the misrepresentation of his master's "Evidence at the Barr of the house."

66 Joseph Ridgwayl to Benjamin Gott,

Wallsuches, near Bolton, 30 November, 1801.

Address:—Benj<sup>n</sup> Gott Esq<sup>re</sup> Furnvalls Inn Coffee House Hollborn London.

We enclose you statement of our acc<sup>t</sup> with M<sup>r</sup> Bramah, the originalls we coud not seperate from our Invoice guard book—we likewise hand you an acknowledgement for one payment—the other is mislaid—if necessary to have the payment introduc'd as evidence—we give you the particulars of the dft on Thelluson Brothers & Co the which by application to them we trust you may obtain—

The press framing or chucks which were cast in Manchester are independant of the above amounts and which cost for both of them about £110 or £112—exclusive of the erection—our presses are erected in two distinct part of the works,—had they been together we should have objected to two sets of pumps—supposing one set of pumps would work two or more—in that case we should have objected to paying the amount not having the compleat patent apparatus—since beginning to write we find we did not pay Mr Bramah our dft on Thellusons but a promiscuous bill—the copy of which is inclos'd—if any further information be wanting in this business in our power we shall be happy to render it—very Respectfully Dr Sir—for Father & Self your obt Sert Jos. Ridgway.

[Enclosures: No 1] Pimlico near London Apr. 29<sup>th</sup> 1799.

Masars Didawar & Con To Jasanh Dramah Dr	. ) _	19.	<i>y</i> •
Mess <sup>rs</sup> Ridgway & Son To Joseph Bramah D <sup>r</sup>			7
To a patent apperatus of a hydro-mechanical Press capable	£	S.	d.
of overcoming the weight of 400 Tons with the power of			
3 Cwt. acting at the extremity of the Lever of the small }	120	_	_
Pump when the fulcrum is moved into the shortest shift			
next the center of action on the Piston			
To Regulator including patterns &c			
7 feet $\frac{3}{4}$ in close case to pack Cistern		2	01/2
28 6in super rin elm case		II	$10\frac{1}{2}$
15 ,, $6^{in}$ — $\frac{3}{4}^{in}$ deal $d^{o}$		4	$6\frac{1}{2}$
Packing & Battens		5	
Iron plate to fasten Piston in Cylinder		3	_
$1\frac{1}{2}$ in bolts to fasten Piston in d <sup>o</sup>		I	
34 feet $\frac{3}{4}$ in Close Case to pack frame		9	ΙΙ
$16   d^{\circ} \frac{3}{4}$ in $d^{\circ}   \dots   to pipe   3\frac{1}{2}$		4	8
Packing & Battens		2	6
Lighterage to Cottons Wharf & Expences Cartage )			
I Load to $d^0$ $d^0$	I	12	
$egin{array}{cccccccccccccccccccccccccccccccccccc$			
Mans time 63 days attending to direct and fix a hydro-			
mechanical Press58/o Pr Day	15	15	-
A fourth share of coach-hire & travelling expences to			
Manchester	1	6	6
A third share of expences of Letters & sundry journeys			_
to Manch <sup>r</sup> to alter patt <sup>s</sup> &c.		4	8
Sepr 23. An Apperatus for an hydro-mechanical Press as before	120	_	_
An Iron Plate to fasten piston in Cylinder		3	_
2 $I_{\frac{1}{2}}^{1in}$ Bolts to $d^0$		I	
To $17\frac{1}{2}$ feet of $1^{in}$ Elm Packing Case @ $5^{d}$		7	3 1/2
23 feet. $I^{in}$ deal $d^0$		8	$7\frac{1}{2}$
23 feet $1^{in}$ deal $d^{o}$		5	II
Packing Battens &c.			_
Cartage & Shipping expences			_
	£263		$-\frac{1}{2}$
1 3 6 7 7 7 3 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2	1:

<sup>&</sup>lt;sup>1</sup> Mr. Thos. Midgley of the Chadwick Museum, Bolton, kindly supplies

The original Invoices are pasted in our Guard Book, but the above is a true Copy of them.

W. H. Charlton.

[The other enclosures have not been printed.]

67 GEORGE & W. RANDALL to BENJAMIN GOTT,

Wilton, I December, 1801.

Address:—B. Gott, Esq<sup>r</sup> Furnivals Inn Coffee House London. By this Morning post we receiv'd a Letter from M<sup>r</sup> Read¹ of your House informing us that a Tryal was coming on between you and M<sup>r</sup> Bramah of Piccadilly & requesting us to furnish you with M<sup>r</sup> B— Invoice and Rec¹ for our Hydro: Press[;] agreeable thereto we have herewith sent it. you'l observe by the Bill that what is chargd after Dec<sup>r</sup> 23 is owing to a Misfortune[,] some of the Works having given way[.] we are not confident that M<sup>r</sup> B—consider[s] himself fully paid as our Elder Brother who had the settlement of the Acc¹ is from home, but this we know that the Press came to a much greater sum than what we were given to understand it would[,] & for some time we entertained an Idea of resisting the charge. M Read's letter should have been with us before but by some mistake it was missent to Birmingham. Our press measure[s] in the clear from the Bed to the Head just 6 feet & the distance between the Standards 3 ft. 6 in. the pipe to the pump is ½ Inch. if you wish any further information on the Subject if you will drop us a line we will with pleasure communicate to you.

N.B. When you have done with the enclosed we'll thank you to

return them.

68 W. F. & G. to GEORGE & W. RANDALL,

Leeds, 28 December, 1801.

[Copy of letter in B. Gott's handwriting.]

We thankfully return you y<sup>r</sup> Note from Bramah which you were so obliging as send us—The papers would inform you that we succeeded perfectly in resisting y<sup>e</sup> attempt made by him to prove we had order<sup>d</sup> 9 of his presses & that villainous business was soon settled, not only [by] y<sup>e</sup> testimony of 3 Persons who heard y<sup>e</sup> conversation, but [by] y<sup>e</sup> testimony of 3 others to whom B's brother, his only witness, repeated y<sup>e</sup> conversation at 3 different times after

the following information drawn from the privately published volume Concerning the Bleaching Industry, compiled by Sir Alan John Sykes and issued by the Bleachers' Association Ltd. in 1925:—Joseph Ridgway was born in 1765, the son of Thomas Ridgway who with his brother John had a "bleaching ground" at Dog Brow, later known as Ridgway Gates, Bolton. Following a disastrous fire they removed their works to Wallsuches, Horwich, in 1777. Joseph was taken into partnership in 1786. The Ridgways were probably the first bleachers to use the Chlorine process on a large scale. In 1798 they installed a ten horse-power steam engine, and their agreement with Boulton & Watt is reproduced in facsimile in the above-mentioned volume. The works at Wallsuches were acquired by the Bleachers' Association in 1900.

<sup>&</sup>lt;sup>1</sup> Mr. Read was one of the "manufacturers" at Bean Ing.

—we had other witnesses[,] one a merchant of respectability in Lond<sup>n</sup> & y<sup>e</sup> other a Gentleman who was present had more proof been required—The only thing we could build upon was an attempt to get costs by havg brout in a Note 3 mo after our solution had made the tender, & [in] wch note we referd to the order for 9 Presses weh were ye subject of litigation, when he attached ye charge as an expense to which we were liable as connected with the first press & that therefore our tender of a sum for ye first press had not been sufficient.—The second Note so sent in was done[,] to use ye Judge's own words[,] for ye purpose of tricking us out of costs after ye tender had been made[;] but he would take care to protect us from such an attack—& recommended it to us to apply for ye Costs by affidavits that we considerd ourselves as having tenderd all that the first press was to cost—the Jury after examing this surcharge & reducing ye charges of it from near 100£ to 81£ by deducting his charge for plans—& 2d P Ct on wrought Iron & 2/- p Cwt on cast Iron weh he had charged us with more than he had paid[,] awarded to him ye last mentd sum of 81£ something & deductg ye 900£— Whether we shall take ye trouble of applying for Costs—or perhaps pursue stronger ground against B's Brother[,] ye Witness[,] we are yet uncertain. Our Press has not been found to answer ye Workmen's purpose nearly so well as ye Screw Presses we use[,] but this subject there may [be] no necessity for agitating—as they may be made to answer no doubt, but certainly not better than good Screw Presses and at 2 or 3 times ye expence[,] whilst ye simplicity of ye latter secures the owner from future expences.

### 69 GEORGE AUGUSTUS LEE1 to BENJAMIN GOTT,

Upon my return from Bath I find your letter of 26<sup>th</sup> and am sorry it could not be answered in time. An Assessment upon Steam Engines and Machinery has not been positively admitted here but a very considerable Addition has been made upon the Rating of the Mills and paid for by many though objected to by others. I think you ought to resist the claims in limine, since if the law is strictly enforced you may insist upon all property in Warehouses Shops and even private houses being included—perhaps you had better make as sturdy an opposition as possible in order to obtain a moderate

Mary Anne, daughter of George Augustus Lee, married in 1829 William Ewart, and their daughter married Benjamin Gott's son, William [D.N.B., article "EWART, William."].

<sup>&</sup>lt;sup>1</sup> Extract from article "Lee, John," in D.N.B. "His only son, George Augustus Lee (1761–1826), was a partner in a well-known firm of Manchester cotton-spinners (Phillips & Lee). He honourably distinguished himself by his readiness in adopting new inventions in his factories. Boulton and Watt were among his friends, and the steam engines which his firm introduced into their works were said to be the finest specimens extant of perfect mechanism. Lee was the first to employ cast-iron beams in his mills so as to render them fire-proof, and he was one of the first large employers to introduce gas into their workshops. He induced his workpeople, who numbered a thousand, to raise and administer a fund for mutual relief in sickness."

Compromise. Mr Bage applied to me long ago about a dispute in Shrewsbury which Marshall must know the Result of. Upon my Enquiring here for more minute particulars, young Drinkwater told me he had furnish'd Mr Marklandl lately with all that could be obtain'd with whom you have doubtless conferr'd. We have never paid any addition upon the old Mills but they have rated us much higher in the new.

Your Commission is given to M<sup>r</sup> W<sup>m</sup> Henry and likewise M<sup>r</sup> Bramleys Letter, which he will reply to upon an early occasion.

We have some time ago transmitted another Commission to Leghorn for Oil having no Correspondent except in Cotton in Portugal, but I believe the latter is more œconomical—perhaps upon a convenient Occasion you will order for us 2 or 3 pipes as a further Experiment. We are in your debt for the last which has inadvertently escaped notice as well as a general balance. Will

you favour us with the particulars and we will adjust it.

And now, my friend, I will acquaint you and Mrs Gott in confidence with a Circumstance which will afford you a particular Satisfaction, because of all others it probably will contribute most to my Happiness in Life. I am sure you could not have entertain'd such a Regard for me if you had suppos'd my Heart wanted Susceptibility and was insensible to the sweetest Tye in Human Life—A peculiar Temperament and a decided Impression rivetted in my mind that none but the warmest and the purest Motives could secure to it Happiness in Matrimony[.] I became from Destiny an unwilling philosophical Spectator in Life—in the course of our Journey in Scotland I found in Ewart's youngest Sister those Qualities so essential and indispensable in domestic Life, good temper, good Sense, a pure and translucent Mind with a warm and affectionate heart beyond which I had little to wish and nothing to regret—As our Sentiments were in Unison Affection became reciprocal and you may expect in April that Union which forms the greatest Crisis in Life. In writing to you my Heart is too full to be reserv'd and my Understanding satisfied in making a premature communication. I shall not dwell upon a Subject more of feeling than Description but recommend myself to your and Mrs Gott's remembrance and best wishes.

Yr friend

G. A. Lee.

70 BENJAMIN GOTT to JOSEPH BRAMAH, Leeds, 29 March, 1802. [Unfinished and unsigned; presumably copy.]
We learn from your Letter of the 25<sup>th</sup> Instant that the sale

We learn from your Letter of the 25<sup>th</sup> Instant that the sale and general adoption of your Patent Presses have been prevented by unfavourable representations respecting the mints & utility of the one you erected for us, and you wish to know in what respect it is that the Machine does not answer the intended purpose & that

<sup>&</sup>lt;sup>1</sup> Markland, Fenton & Dearlove ordered a Boulton & Watt engine for their cotton mill at Leeds in 1792.

you will remedy any defect we may point out. It might have occurred to your inventive mind, that after the application of any new method for obtaining mechanical Power has been tried in this Country, it will, if it be found to possess superior Advantages, succeed in Proportion to its worth, and find its way into general use even notwithstanding the misrepresentations of individuals. On the contrary, if after the novelty of the invention has induced Persons. in various parts of the Kingdom to make trial of it, it should sink into disuse, the inventor ought to suspect some other cause than the misrepresentations of any, because the People of England will judge for themselves, and those who have tried any machines and found a realized advantage from the use of them will speedily consult their own interest by generally applying such productive power & the rivalship of their neighbours will bring them into general The greatest opposition men of abilities have to dread, & the quarter from whence their inventions have been most successfully mis represented to the public, is from persons who are employed in constructing machines to produce the same Effect[;] this was the case, to compare small things with great, in the Steam Engine of Messrs Boulton & Watt, but the intrinsical Excellence of that Machine prevailed against all the varied attempts to injure them. You remark that nothing could be more perfect than those parts furnished by yourself, and we have no reason to doubt the Low Moor Company equally exerted themselves to bring the invention into repute, that the perfection of your Press which so far as we know was the first trial of it in Yorkshire might insure a great Demand[;] and as the Construction of those Parts of the Work on which the principle of the invention was done by you and put up under the inspection & with the assistance of a Person so experienced as your Brother[,] we infer all was perfect. Acting under this impression we wished to give it the fairest possible trial encouraging our men to use it, and as the whole of that part of our business is done by task work, they were equally disposed no doubt to give a preference to a press which wou'd facilitate their work, that they hardly cou'd be biassed in their Judgement against their own interest is to be inferred from this, that the number of Presses we then had fixed was equal to our business so that no maker of Screw presses cou'd be induced to influence them, and if they had found yours answer better, they would have given yours a Preference. We are also lead to conclude from this that as they knew our disposition if this shou'd answer their purpose by the decrease of labour and of ours by the Effects, it so happened that these workmen with the choice of all the Presses before them preferred their Screw presses to the new one so that we believe they have ceased to use it. We must further tell you that we look after every operation of the work ourselves, and if we had experienced any advantage from the use of your press, we should have insisted on those men working it, or we shou'd have appointed others in their places who would have been obedient. We have not had any opportunities of giving our

opinion of the Press because it has not as far as we recollect ever been enquired after but if you shou'd have an opportunity of disposing of one in Yorkshire as ours must be as good as new we shou'd hope from the returning disposition towards a friendly reconciliation expressed in your Letter, you wou'd take ours of our hands at half price. In all Christian Charity we rejoice that your thoughts by the words of the concluding sentence of your letter, are turned towards that Tribunal where as you so justly observe nothing but truth can enter, and we hope that without more practice in the Courts of this transitory World you may be in friendship with all Men.

71 GEORGE AUGUSTUS LEE to BENJAMIN GOTT,

Manchester, 28 December, 1804.

.... I have no doubt that Sheet Iron would prevent, in an equal Degree, when nail'd upon the Joists below, or above the Floor; I preferr'd the latter, principally upon account of Cleanliness, as the Oil could not sink and become putrid in addition to the Convenience of applying it upon Floors already laid & in some degree injur'd by wear. I recommend this Method in all cases where Oil is necessarily spill'd or Sprinkled by Machinery, because the Oil prevents the dry-rubbing of the Iron by the dirt upon the feet of the People, and it proves both very clean & durable; but in Cases where dry Sand, or Water were likely to be trod I should prefer nailing the Sheet Iron (painted) under the Floor, or Flags upon ground Floors.

Our Iron Floors have been several years in use and will last, under the Circumstances above stated, longer than boards; the Sheets are  $\mathbf{1}_{\frac{1}{2}}$  lbs p. sup. foot where there is much wear &  $\frac{3}{4}$  or as thin as possible below the Machinery—you must be particular to lay it without puckering or projection & let it be well fasten'd down with Abundance of Nails; the Expense of Materials & Workmanship will be about  $4^d$  p. Sup. foot as you will find upon Calculation. If the Props are Iron & the floors cover'd either above or below with Iron there is but little Necessity I think to plate the

Beams.

I should think if you run Gypsum you wo<sup>d</sup> add very considerably to the Weight upon the Beams.

I enclose you a paper upon Hartleys plan weh please to

return.

Thanks for y<sup>r</sup> Care of the Book—best Regards to y<sup>r</sup> fireside.

72 Thomas Lloyd to B. Gott, Horsforth Hall, 23 June, 1805, I have this Morning heard from Mr Oddie & his answer to me is similar to that which you have receiv'd. He does not mention how soon he shall be at Kirkstall, & as it is Necessary that part of

¹ Colonel Lloyd of Horsforth Hall was the most prominent figure in the story of the Leeds Volunteers from 1794 to 1808; see Thoresby Miscellanea, xxviii, 265-312. The subject of his letter to Gott is obscure, except that it relates to land adjoining the Armley Mill, of which Gott was Lloyd's chief tenant at this time. Thomas Lloyd had enlarged or refitted the "Fulling Mills in Armley" in 1790. See advts. nos. 154 and 155.

the Land (on the Burley side of the new Road) should be plowed and fallowed, the fences repair'd & the foot Roads stop'd immediatly, I think there can be no impropriety in your occupying the Land under me, till he comes down & that the matter is finally settled.—If you should be of this opinion & that it is agreable to you to enter upon it now, you will give such directions as you may think proper with regard to the fences Roads, plowing &c.

#### 73 GEORGE AUGUSTUS LEE to BENJAMIN GOTT,

Manchester, 16 January, 1805 [for 1806].

I deferr'd acknowledging your letter on account of the Indisposition of  $M^r$  Murdoch as I wish'd you might meet him both on account of the New Lights & of the important Advice which he might give in respect to your new Plan.—He is this day but scarcely able to leave his Room & finds some particular private Business obliges him to go to Soho to night very unexpectedly. As it is probable he may be detain'd a week or ten days, we shall be very glad to see you &  $M^{rs}$  Gott when & as early as convenient to yourselves, and as the application of this Discovery upon an extensive Scale would I am sure be gratifying to the philosophical Mind of  $M^r$  Joshua Dixon we hope he will be able to accompany you.

We have completed a considerable Part of the lighting Apparatus & have a Part of the Mill at work by it—much to our Satisfaction, but it evidently will be improv'd by Practice & Experience; we are at present sufficiently advanced to know the

Ground we have to tread upon.1

[P.S.] Mrs Lee desires me to say how much she hopes Mrs Gott will venture across the Ridge & that the Rooms will be well air'd & ready for yr Reception.

P.T.O.

<sup>1</sup> "On Murdock's return to Soho in 1798 he proceeded with his investigations, and contrived an apparatus for making, purifying, and storing the gas on a large scale; and several of the offices in the building were regularly

lighted by its means....

"The manageableness, the safety, the economy, and the brilliancy of the new light being thus proved, Boulton and Watt in 1803 authorised Murdock to proceed with the general fitting up of the manufactory with pipes and burners, and, from that date, it continued to be regularly lit up with coal-gas. Several large firms followed their example; amongst others Phillips and Lee, Burley and Kennedy, at Manchester, and Gott and Sons at Leeds; and the manufacture of gas-making apparatus became one of the regular branches of business at Soho."—Smiles' Lives of the Engineers: Boulton & Watt, London,

1904, pp. 401-2.

The enterprise of G. A. Lee in introducing gas into his house and mill is also noted in the handbook of the Salford Historical Pageant this year in celebration of the 700th anniversary of its Charter:—"The manufacture of coal gas in Salford dates back to the year 1804 when Mr. George Lee, of the firm of Messrs. Phillips & Lee, had his house in Chapel Street, Salford, lighted by Gas. In 1805 parts of the extensive cotton mills of the firm in Chapel Street were so lighted." Hence came this invitation to Mr. and Mrs. Gott and the "philosophical" Joshua Dixon to view the novelty. It was not long before Gott installed gas in his factories in Leeds, for after the fire at Armley Mill the accounts of the rebuilding in 1807 contain "Expense of Gas Lighting £978·13·0d." The Boulton and Watt MSS. contain plans of the gas plant at Bean Ing, Armley and Burley Mills.

74 Philips & Lee to Wormald, Gott & Wormalds, Manchester, 21 Nov<sup>r</sup>, 1805.

[Copy on a blank page of the preceding letter.]

We request you to forward as soon as possible Two Pieces of Cloth equal to Sample inclosed & please to make it as fleecy as possible—

We shall remit the Balance of our Acc<sup>t</sup> upon Receipt of this Parcel[;] we therefore request you to charge it at the Ready Money

Price.

75 'GENERAL LUDD' to 'all croppers' and to 'M' SMITH.'
Before 9 March [1812].

4<sup>to</sup>, 4 pp., last 2 blank. No address.

[a] To all Croppers, Weavers &c & Public at large

Generous Countrymen. You are requested to come forward with Arms and help the Redressers to redress their Wrongs and shake off the hateful Yoke of a Silly Old Man, and his Son more silly and their Rogueish Ministers, all Nobles and Tyrants must be brought down. Come let us follow the Noble Example of the brave Citizens of Paris who in Sight of 30,000 Tyrant Redcoats brought A Tyrant to the Ground. by so doing you will be best aiming at your own Interest. Above 40,000 Heroes are ready to break out, to crush the old Government & establish a new one.

Apply to General Ludd Commander of the Army of Redressers.

[b] To M<sup>r</sup> Smith Shearing Frame Holder at Hill End Yorkshire.

Sir. Information has just been given in that you are a holder of those detestable Shearing Frames, and I was desired by my Men to write to you and give you fair Warning to pull them down, and for that purpose I desire you will now understand I am now writing to you. You will take Notice that if they are not taken down by the end of next week, I will detach one of my Lieutenants with at least 300 Men to destroy them and furthermore take Notice that if you give us the Trouble of coming so far we will increase your misfortune by burning your Buildings down to Ashes and if you have Impudence to fire upon any of my Men, they have orders to murder you, & burn all your Housing, you will have the Goodness to your Neighbours to inform them that the same fate awaits them if their Frames are not speedily taken down as I understand their are several in your Neighbourhood, Frame holders. And as the Views and Intentions of me and my Men have been much misrepresented I will take this opportunity of stating them, which I desire you will let all your Brethren in Sin know of. I would have the Merchants, Master Dressers, the Government & the public to know that the Grievances of Such a Number of Men are not to be made sport of for by the last Returns there were 2782 Sworn Heroes bound in a Bond of Necessity either to redress their Grievances or gloriously perish in the Attempt in the Army of Huddersfield alone, nearly double sworn Men in Leeds.

By the latest letters from our Correspondents we learn that the Manufacturers in the following Places are going to rise and join us in redressing their Wrongs Viz. Manchester, Wakefield, Halifax, Bradford, Sheffield, Oldham, Rochdale and all the Cotton Country where the brave Mr Hanson will lead them on to Victory, the Weavers in Glasgow and many parts of Scotland will join us[,] the Papists in Ireland are rising to a Man, so that they are likely to find the Soldiers something else to do than Idle in Huddersfield and then Woe be to the places now guarded by them for we have come to the easier Way of burning them to Ashes which will most assuredly be their Fate either sooner or later. The immediate Cause of us beginning when we did was that Rascally letter of the Prince Regents to Lords Grey & Grenville, which left us no hopes of any Change for the better, by his falling in with that Damn'd set of Rogues, Percival & Co to whom we attribute all the Miseries of our Country. But we hope for assistance from the French Emperor in shaking off the Yoke of the Rottenest, Wickedest and most Tyranious Government that ever existed, then down come the Hanover Tyrants, and all our Tyrants from the greatest to the smallest, and we will be governed by a just Republic, and may the Almighty hasten those happy Times is the wish and Prayer of Millions in this Land, but we won't only pray but we will fight, the Redcoats shall know that when the proper time comes[.] We will never lay down our Arms. [till] The House of Commons passes an Act to put down all Machinery hurtful to Commonality, and repeal that to hang Frame Breakers. But We. We petition no more[,] that won't do fighting must.

Signed by the General of the Army of Redressers

Ned Ludd['s] Clerk

Redressers for ever Amen, You may make this Public March 9<sup>th</sup> or 10<sup>th</sup>

Sir. No doubt you are Informed as to the proceedins of the Ludites[.] But feariful you Should Not to the Extent is the Caws of My Trublin you thus=a friend of Mine ad it from a Man that was Theair and on Sunday Night at Rounda wood to the Number of 400 thay theair Decreed the Death of 2 and with Great Diffecalty He Extorted from the Man that you was one=Be Carful of your Self for a few Weeks=alter your usal walks to your Busness=I will Giv you all the Information In My power[.] Be of Good Currige But Be Carful=I Mentioned it to two of My friends who know your worth to the Town and world Ingenaral as well as Myself[.] you do Not know Me But I will Be your Gardin angell as far as My abillites Go—Rest Satisfide that if I Can find out the

¹ Joseph Hanson, a colonel in the volunteers, championed the cause of the distressed Lancashire weavers. He openly supported them in a great meeting held on May 25, 1808, at Manchester, and was sentenced in May, 1809, to six months imprisonment and a fine of £100 for having thus encouraged the strikers. J. L. & B. Hammond, *The Skilled Labourer*, p. 81.

Tigars that is apointed for that Infernall Job you Shall ave a Good account of them or Him. God Bless and preserve you through these difficalt Times.

do not Cummunicate this to aney one—do Not Indevor to find Me ought and you May Rest Satisfide I am your well wisher I-G. Leeds 15<sup>th</sup> May 1812

77 Agreement on Dissolution of Partnership, 9 January, 1817.
Memorandum of an Agreement of four parts made the 9<sup>th</sup> day of January 1817 between Benjamin Gott the Elder of the first part, B. Gott & Richard Wormald as Executors of Harry Wormald deceased of the second part, Richard Wormald of the third part & John Gott Merchant of the fourth part.

#### Abstract.

Whereas (a) Benjamin Gott, Harry Wormald, Richard Wormald & John Gott prior to 1st January 1815 carried on the business of Cloth Merchants & Manufacturers in Leeds and (b) from the said day they carried on the same business in Copartnership with Benjamin Gott the Younger deceased until the death of Harry Wormald on 7th June 1816, & (c) after his death the surviving Partners continued the business until 31st December last when it was dissolved by mutual consent; and whereas (d) Benjamin Gott the Younger hath since departed this Life intestate the several

parties have agreed as follows.

That Benjamin Gott & John Gott shall have the Mill called Park Mill or Bean Ing with the Engine, Machinery Utensils & so much of the Land near to it as was comprized in the original purchase from Mr Woodcock & in the exchange with Mr Wilson & also on the South side of the River so much as lies on to the East side of the Wellington Turnpike Road and also the Lease of Burley Mill & all the Machinery & Utensils therein; the land to be reckoned at the original cost & the Road on the South side of the River at the prime cost of the Land, and the Mills, Buildings, Machinery & Utensils to be taken at the price at which they were valued on 1st January 1815; other land & buildings purchased of Mr Pottgeisser & Christopher Wilson Esq. [as specified] to be paid for at the purchase price. But as the Mills Buildings Machinery & Utensils are from wear and tear and from the depressed state of Trade of much less value than in the said valuation, the Executors of Harry Wormald have agreed to abate £5000 from his share of the valuation of Park Mill, and £1000 for Burley Mill, and Richard Wormald has agreed to abate from his share £5000 for Park Mill & £1000 for Burley Mill.

That Richard Wormald & the Executors of Harry Wormald shall have in Equal shares the remainder of the Land at Park Mill or Bean Ing on both sides of the River Aire at such price as the Land cost, the amount to be carried to their respective Debit as so much of their Capital, & shall have free use of the Bridge

over the River so long as it continues passible.

That the Road now set out on the West boundary from the River to the new Road shall be paid for by Messieurs Gott and the Executors & Richard Wormald in Equal Moieties & used by them & their Tenants.

That the settlement of Partnership Accounts of 1st January

1815 shall be the basis of the new settlement.

That the Remainder of the Stock & Utensils in Trade Book Debts shall be taken by B.G. & J.G. who shall pay as in the said Account after various deductions including one of  $12\frac{1}{2}\%$  on the value of the Goods & Book debts to cover the risque of bad Debts and the trouble & expence of disposing of the Stock & collecting the Debts, with an additional allowance of  $2\frac{1}{2}\%$  from the shares of R.W. & the Executors in the Stock & Book Debts if the abatement of  $12\frac{1}{2}\%$  is insufficient.

Interest at 5% to be paid half-yearly to the Executors & to R.W. on the Money which shall be due to them from the Concern

until the principal is paid.

That their shares in the money arising from the Mill Buildings Land & Machinery at Park Mill or Bean Ing taken by B.G. & J.G. shall be secured on mortgage of the Premises for seven years from the Ist January; & that the remainder of the Money due from the Concern shall be paid to them in ten years & secured by the Bond of B.G. & J.G.

Witness the Hands of the said parties

Benjamin Gott

Witness.
Thos Everard Upton

Benjamin Gott Executor of Harry Wormald

Richard Wormald

Richard Wormald Executor of Hy Wormald John Gott.

78 A Return by Jn <sup>o</sup> Dixon			31 July, 1819.		
				Women	
			Men	&	Total
				Children	
Number of Persons	employed at	Park Mills	362	239	601
$\mathrm{D}^{o}$	$D_{\underline{0}}$	Armley Mills	57	121	178
$D_0$	$D_0$	Burley Mill	98	110	208
			517	470	987
$\mathrm{D}^{o}$	$D_0$	Warehouse	28	4	32
July 31st, 1819.		Jnº Dixon.	545	474	1019

## THE LETTERS OF JOHN HOPPS.

These letters were addressed from the counting-house to Benjamin Gott during his absence from Leeds. They are very detailed, and only a résumé of the contents is given here, with sundry extracts. The place to which the letters were addressed is put at the head of each batch.

79 To Benjamin Gott at Scarbro' Leeds, 24 August, 1796. Nine letters come by Hamburg mail. 'Nymph' ready to sail for Lisbon, as convoy about to go to Gibraltar; will despatch as many goods as possible to Hull at once. Report on property of Bonvarlet<sup>1</sup> of Dunkirk who died in prison in Robespierre's time.

80 25 August, 1796.

Purchase of wool from Bremen—10 letters from Lisbon. 'Our principal view has been directed to get the coatings off, for should the Rascals visit Portugal, or we have any unfavourable accounts, the cloths &c are any time a mere exist article.'

81 26 August, 1796.

Merchants at Lisbon may like to have property transported to England in case of a French invasion. Other Lisbon news.

Stoppage at Methley in water transport. May have to get

waggon to take goods by land to Selby.

Application by a young man to overlook dressing at B. Ing; was working as a cropper with Nevins & Gatcliff.

82 To the same, c/o Wm., Thos. & Jno. Prestons, Merchants,

Aldermanbury, London, 13 April, 1797.
Remittance from Baltimore. Increased cost of insurance.
Letter inclosed from Hopkins & Gray 'in all probability announcing the disaster in Italy befallen the Archduke.' Letter from Berne on fluctuation of exchange. Ship to Boston on May 1st. Insurance of goods to Lisbon. 'All right at Mill as far as I can hear.'

83 Letter from J. & R. Colquhoun, London, with a very large order 'for the fall.'

17 April, 1797. 84

Seven letters from Lisbon. Trade in coatings. Portuguese

complaints of bad quality.

Mrs Harry Wormald desires 'you will have the goodness to purchase for her some seed for fine flowers, if beauty and odour be united.. Whilst I am speaking of Ladies I observe you say nothing of Mrs Gott's health.. Whatever effects your happiness we must and do all feel it in different degrees in proportion to our connexions dependancies and sensibilities, this comes in mal à propos but nevertheless the reality of it gives it a sanction above all forms of precedency, arising from the Heart.'

'I find there are other orders in town for the military from Russia.. I imagine you will not engage in that quarter but from the discount we allow export Houses am persuaded we could cut

all out in that Trade.'

M<sup>r</sup> Thomas Wormald meeting M<sup>r</sup> Marsh of S. Petersburg. Commission for 'Frybourg in Suisse.'

<sup>1</sup> Bonvarlet's debts are noted in footnotes to the accounts of co-partnership for every year down to 1809.

85 18 April, 1797.

Samuel Knowles of Dewsbury declines to come to serve you

in the capacity of a fulling miller.

Note from Vicar desiring attendance 10th inst. at Hicks's on the pious use Business. Have just been to see the children who continue very well. William, as yesterday, was asleep, John & Benj<sup>n</sup> at Armley..they & M<sup>rs</sup> Rhodes all very well..I only saw the 2 little Ladies who look charmingly.. Good deal sold in the Coloured Hall.

Enquiry from Manchester for plain and mixed cassimeres to value of £3000. Enquired of Bartons after them this evening. £400 cash for B. Ing drawn from the Bank on 15<sup>th</sup>.

86 20 April, 1797. No letter from you.. 'I consider you have much business on hand and the Ladies to attend into the Bargain.' Letter from Charles Brooke, a London wool-broker, enquiring as to the soundness of a Leeds firm "under the circumstances and the present un-

fortunate situation of Trade in your neighbourhood."

21 April, 1797. 87 Three American letters. Position of Ritter of S. Petersburg. Prices of sheets for navy also 'prime cost list of Coverlets.' 'Is the house of Cazenove & Joy of Geneva solid & respectable?'

To the same, at Aldermanbury, London, 1st Nov., 1797. 88 Yours from Rochester, acknowledging none of my letters. Thomas Wormald gone off from Liverpool *re* wreck of 'John' with goods for Ireland from Liverpool. Mr H. Wormald back from his Journey collecting bills. Order for Surinam. Military cloth for Manchester; Bales for S. Petersburg & Hamburg. Further orders probably in consequence of A. Duncan's victory.

89 To the same at Aldermanbury, London, 13 June, 1798. Brown, Hyndman & Co, Belfast:—'It would be perfectly useless to send any person here in such times.. Business is at a compleat stand, for the situation of this country.'

J. Bolton, Liverpool, asks for goods to be despatched at once as "a Duty is shortly to take place on all Exports & will make a difference to me of £150 to £200." Defeat of the rebels at Ross.

oo To the same at Glasgow. 22-25 August, 1798. Last letter was sent to Carlisle. An Irishman named Murphy had called:—' Priestley says not Worth attending. James Brown it seems thinks otherwise for I have learnt he got him into his Decoy at Chap. Town.' 'Thomas Wormald bought at Huddersfield

<sup>&</sup>lt;sup>1</sup> Battle of Camperdown, Oct. 11th, 1797. 'Great rejoicings in Leeds' (Mayhall, p. 189).

yesterday 90 ps including 20 ps Swansdowns, all low priced, & 85 ps the week before.'..' They advise that our Ambassador at Constantinople has wrote our Court that Buonaparte had landed 15 to 20<sup>m</sup> Men at Alexandria the 15 July with little opposition..'

'There has been no further mischief done at the new Works two persons have been on the watch since Sunday evening. Mr Wormald was up there yesterday and the buildings they were going on with are appeared to be up to morrow.'

on with are expected to be up to-morrow.'

Portugal mail II letters; orders for plain coatings, printed cassimeres, Silesias, striped Silesias, & cloth at 9/- down to 3/4.

Hopps adds: 'En attendant je dois vous participer quelque chose touchant une Demoiselle qui on dit, a rencontré un Galant la derniere fois qu'elle et sa mère se trouverent à Harrowgate il est ecclesiastique et s'appelle Addison, on dit que la mère approuve ses recherches, et qu'il possède un Bien de 400 f per an, son père est aussi ecclesiastique Curé (Viccar) de quelque ville près de Darlington.... je vous prie inst[amme]nt de garder secret ce que je viens de vous communiquer.' [the rest eaten away].

We have your favor from Edinbro'. Letter from Jos. Dixon from Dumfries. Lisbon mail—11 letters from Portuguese. 'Ribeiro & Silva will get us orders in return for our promise to recommend their House to our friends for Brasil produce.' Manoel Simoes Ferreira..will give us orders when the Convoy arrives from Bahia

in Brazil.

'The association<sup>1</sup> has been but few and never at Woodhouse<sup>2</sup>

or at any place out of the Hall yard since your absence.'

I meant that intelligence concerning a Young Lady should be entre nous M<sup>r</sup> Hinchcliff I & you being only privy. If you have time to call at Darlington to get the Manufacturers prices of Hucabacks pray do it.

92 To the same at Aldermanbury, London, 12 Dec., 1798. Six letters: James Sutton & Co. quote price of Cochineal and Spanish Indigo.

93 18 Dec., 1798.

A few small orders but very little money.

The Kerseys were ordered of T. Bates: he is doubtful if he can procure them next market day;.. if not it will remain for us to apply to Lea & Priestley, Stansfield, Crossley, or some other kersey maker.' 'It is said the Lisbon Convoy is fixed for 15 of next month'..it is said our neighbours Messrs. J. & E. Brookes & J. & A. Rhodes are very busy for same quarter.

<sup>&</sup>lt;sup>1</sup> The local Volunteer Association of which Gott was Captain-Commandant this year.

<sup>&</sup>lt;sup>2</sup> 'This waste ground..furnishes a convenient spot for the training and exercising of our Volunteers' (*The Leeds Guide*, 1808, p. 139).

M<sup>r</sup> Wormald is at Huddersfield; there has been a brisk market for mid-priced Cloths in our White Hall. Irish Mail just in with orders for blankets &c.

94 To the same at Portsmouth, 31 July-3 Aug., 1799. Bales on board 'Ann & Francis' for Lisbon. Names of Lancashire firms likely to make goods for Gotts. Convoy for Lisbon & Porto to sail soon, 'Pacific' for Philadelphia, 'Stafford' for Baltimore.

Aug. I. James Watt & Co., Birmingham: invoice of the apparatus ordered. Seven letters from Portugal.

Herbert:—" I am the more anxious to write you by this conveyance because [you need have no] thought in times like the present to abandon any Trust reposed in me, you will learn by this [time from] the public prints that the French fleet entered Cadiz on the 12<sup>th</sup> instant in conjunction with the Spanish. [What their] object may be in sailing from thence time only can develope. I would not wish to alarm you by hazarding that their destination may be Lisbon to which they are so approximated. I am still rather inclined to suppose [if it] come to the Worst, the Enemy will be bought off, and from the recent arrival of two very valuable Brazil [ships the] Portuguese can afford to pay handsomely, but the port regulations being now strictly enforced, the Troops ordered [to be in] readiness for any emergency, the militia appointed to keep the Outposts in the absence of the Regulars, I have thought..to mention to you as indictive of something extraordinary in the proceedings of this Court. The Spanish ambassador is likewise talked of as being about to leave the kingdom. Let the Event be what it may I can only assure you that I shall [find] a pleasure in securing your property for you in case of danger, & in promoting your welfare..I beg leave to condole with you on the loss of your worthy Connexion Mrs Fountaine."

'It would appear from the complexion of Herberts Letter, that the Portuguese are in no little apprehension of something being meditated against them by the combined fleets of France & Spain. What's become of Lord Vincent & Keith with the Fleet: they surely will arrive in time either to keep the Enemy in harbour or to give them battle if they stir out.'

Letter from Bremen. Gibson of Gosport wants goods for Gibraltar. Aug. 3. Note by Richard Wormald:— 'I am sorry to say that we were oblig'd to stand at the Mill on Wednesday on Acct

of the Piston Rod coming loose..' HOPPS resumes:-

'All well at Armley where Benjamin dines: do not think I am deceived or flatter when I [s]tate he will become a good scholar, I have pried a little into him since he went to School, he did [not seem] to like the first 2 or 3 Days on account of a Task he has to learn every evening, but now is..' [rest lost].

95 To the same, c/o R. Fennel's, Merchant, London,

4-10 Aug., 1799.

Daily report on the contents of letters received from Glasgow, Norwich, Liverpool, London, New York, Philadelphia, Thurso, Kirkwall, Tadcaster, &c.

7 Aug. 'I omitted saying before that Lord Grantby and his tutor were at the Mill and this day [piece torn out] and Miss

Baring of Exeter..might be opportunity for return of civilities.'

R. Oastler paid this day £300.
9 Aug. Invoice from R. Fennel of Nicarragua Wood at £32 and..bag of Cochineal at 22/6. Cloth from Mr Hopes in Dublin

now at Liverpool being forwarded by the Duke's Canal.

G. Oswald & Co, Glasgow, order the 2 Bales left out of the Baltimore ship at Hull to be forwarded for Philadelphia. Mr Humphreys has been here & bought 6 Bales, I of Scarlet coatings, I of double milled, the others chiefly olives, olive browns, bloom mixtures & a few drab coatings. James Roberts Jun<sup>r</sup> of Delph enquires respecting some cochineal that M<sup>r</sup> Wormald had spoke him about.

To Aug. Invoice of To Bags Spanish Wool at 4/9. Mr Richard Wormald will in all probability give you an account of what's going on at the new Mill. Mr Humphreys has looked out another Bale: the amount of his purchase £1,300 and upwards. We have had two Gentlemen from Cork. 'The Miller from London came on Manday last, understand he has two same that will same came on Monday last; understand he has two sons that will come also. The old ones at the Mill are exerting themselves to shew in competition wth him what they can do. Toseph was at the school to-day.'

P.S. by R. Wormald:—' Never saw goods so scarce..almost impossible to buy any coatings..I think they proceed slowly on at the Kirkstall Mill, they have turn'd the upper Arches & wou'd have had the others done also, but we have had so much rain that the Mill Races are perfectly under water at present. I think everything appears to be going on tolerable at B. Ing—you know we are very low in Cochal & Indigo...

To the same c/o Richd. Fennell's, London, 23, 24, April, 1800. Contains 'an account of the Bales sent, ready and to go 96 for the London friends' with the marks: coatings, plains, cloths, shags, half-thicks, blankets.

97 [A torn fragment.] 3 May, 1800. 'Hope to see you back before middle of next week. We hope the representations to the.. several Bodies of the woollen fabricks will sway him,2 to modify the intended contin.. duties on woollens exported to Ireland, otherwise if he carries on the business to the ..al intention it will be a means of lessening his popularity with the western part [of] Yorkshire at least.'

P.S. by R. WORMALD:—To day we have had a very flat market. Yesterday evening got the Water into the large Cistern which appears to answer very well. I think you had better not return..soon for we have not much to do at present.

<sup>&</sup>lt;sup>1</sup> The petitions to Parliament on the necessity of retaining the duty on wool exported to Ireland which was to be removed by the Act of Union.

<sup>&</sup>lt;sup>2</sup> William Pitt.

5 May, 1800. 98 [Much worn]

..day so that evening there appeared strong symptoms to ..butter, cheese, eggs and everything that coud be come at .. content rather to destroy them than make any use whatever of th.. [The pers]ons who .. standing the market for sale of their effects housed them where they coud. The magistrates soon restored peace with the assistance of the constables, without much injury done either to the assaulters or loss of property to the owners. It is thought the volunteers will be call'd up to morrow to keep peace during the market. It seems that it is not want but wantonness that stirs up this disorderly spirit here which is not a little kept alive and encouraged, from reading and hearing exaggerated accounts in the papers of similar disturbances in ma[n]y other towns in England.'

'We paid John Marriott his Balance £322....with Mr Wormald's remittances from his Journey, who came home on Saturday Evening. Six Letters from Portugal, one from Herbert only advising that he had forwarded 6 Boxes of Oranges as a present for the Company and that Rhodes & Matthewman had sent out patterns of printed Coatings that were liked better than those we

had sent. [Next part fragmentary.]

'[Wilberforce]'s Letter2 which we hope will appear in more of the London papers than one....the m[isrepresentation of] your Evidence at the Barr of the house was not credited here by those even who are but [little acquainted w]ith your Character, & was totally disbelieved by those that are, it is right that a fair statem[ent should be put] before the public, you cannot hope that even this will be sufficient to curb the mali[gnant. To have] the good the wise the rational part of mankind of one's party is sufficient [together wi]th the bulwark of a good conscience. A few fools Knaves Sots and a group of such....[litt]le import what they say or think, let their rank in life be high or low and we are [confident you will not] give yourself the least uneasiness on their score....Mrs. Gott in excellent spirits....[you] would do well to follow her advice in having printed copies of the evidence you gave to the house....

To the same, P. O., Wells, Somerset, 9-11, Oct., 1800. Letter from Nathan Mayer Rothschild copied in full: "Should your Goods pan out satisfactory I hope to be able by next Spring to give you an order to the amount of 5 or £6,000."

<sup>1</sup> The high price of provisions this year caused riots throughout the country. "On May 6th, the Leeds market was disturbed by a great riot, caused by the high price of wheat, which in July rose to from 42s. to 50s. per load of three

bushels.—Mayhall, p. 198.

"On Tuesday last, Benj<sup>n</sup> Willans was committed by our Magistrates to the House of Correction at Wakefield, for heading a mob with an oaten cake upon a stick, and exciting them to riot; and at the same time Samuel Atack was committed to York castle, for having, with a number of other persons, continued in a state of riot within this Borough, for upwards of one hour after the riot act had been read "—Leeds Intelligencer, May 12, 1800.

<sup>&</sup>lt;sup>2</sup> See No. 65 for Wilberforce's letter to which Hopps refers.

'We have here a Mr Gilmour from Derry who has bought a few Blankets & Naps will pay ready Money.'

Copy of Mr Atkinson's letter [to B. Gott, received II Oct.].

Richmond, October the 10th, 1800.

"The Vouchers of the works at Kirkstall are in town at present but on my return there I will send them. The Mason's work I never had any but what was made in the Statement of the Mill which Mr Graham had when at Kirkstall. The Carpenters' work not being finished at the time I left Kirkstall that account was not closed. The Diggers' I have and some others M<sup>r</sup> Elsworth will give you those for Oak Timber and also deal Timber such as was used in the Weir Mill &c. and on my return to London will send you the whole I have. M<sup>r</sup> Graham has the Statement of the whole done the time I was at Kirkstall. The Vouchers for the Mill will be that which was settled by Whiteheads & Mr Graham this Summer."

Copy of letter received from their London agents by Bolland & Atkinson<sup>1</sup> who wish to have M<sup>r</sup> Addison's sentiments upon it. "We have at last got the King's Licence for Mr Addison to take the name of Addison-Fountaine & also the Exemplifications of the Grant of Arms the Heralds Bill for which amounts to £135.16.2."

'We have had a frenchman from Hambro...he will buy nothing at present but will send Patterns of Swansdowns Toilanettes & Cassimeres to his friends. Joseph had been to Armley.'

To the same, P. O., Plymouth, 15–16 Oct., 1800.

Last sent to Falmouth. Two letters for Mr Herbert. Letter from W. Addison Fountaine at Bath acknowledging the receipt of £40 from B. Gott. Letter for Gott 'from one of the Inhabitants of this Place conveying what he says were the Sentiments of the Poor on the dearness of Provisions.' Joseph is just returned from Armley where all are well as all are at your house & Messrs. Wormalds. Mr H. Wormald went on his journey yesterday. 'So slack a time for Business never was experienced as the present as far back as I can remember.' Business with Aberdeen and Dublin.

P.S. by R. Wormald: 'The Mills are going on extremely well.'

101 To the same, at Richard Fennell's, Broker, London,

23 Oct., 1800.

A trifling fire at the mill, damage not above twenty shillings.

Trouble with Customs at Hull over two bales for Hamburg.

P.S. by R. Wormald: 'Fire of little consequence. I think you had better order a hand Engine....Please say by return if the Cottage houses at the Mill are to be underdrawn or not for there will be two ready on Monday.'

24-25 Oct., 1800. I02 Z. Fincham offers 500 tod of wool grown around Norwich at 48/- per Tod. It may be shipped at Yarmouth for Hull. Offer of oil at £70 to £72 per Ton; sample being sent from London per the Coach from the Bull & Mouth. Vessel carrying 2 Bales for Down-

<sup>&</sup>lt;sup>1</sup> Bolland & Atkinson, Attorneys in Leeds, acted for Benjamin Gott. The previous letter quoted by Hopps is from one member of the firm.

patrick wrecked near Liverpool. No hopes of ever recovering 2 Bales from the Custom house at Hull. W<sup>m</sup> Walker of Wortley has been here to-day, shewed a letter from Charles Brooke & Co. announcing the arrival of 5,500 Bags Spanish Wool. Joseph has been at Armley this afternoon.

Dublin order for 1,500 pairs of Blankets. Bankruptcy of a West of England firm—report of Creditors' meeting at Bath.

Luck in getting oil, as Leghorn again occupied by the French.

[much damaged] I-3 Nov., 1804. Certain bankruptcies. Report from Bremen. St. Petersburg:—Mr Marsh bankrupt. Dealings with Rothschild. Mr Bell, Philadelphia, in good humour. Report on Disbursements & remittances to hand.

Trade with Portugal, Wexford, Philadelphia. Sam Little, Stewartstown:—Sending no more orders. Entering into wholesale business. Strengthens idea that combination has become general among wholesale houses.

among wholesale houses.

'Met M<sup>r</sup> W. Cookson<sup>1</sup> at the gate on return from...he had a pamphlet in his pocket that he was desirous to show you, informed him you [were in] London, he writes this Evening to M<sup>r</sup> Wilberforce on the subject of it and requests if you [agree] you will wait on M<sup>r</sup> Wilberforce about ½ past one o clock on Thursday next at.... [when] M<sup>r</sup> W. will be in possession of M<sup>r</sup> Cookson's letter, the Pamphlet or what....[sa]w not but as far as I understand M<sup>r</sup> C. it is the heads of a Bill....before Parliament [concerning] the Jennies &c in Large factories.'

Reports from Hexham & Edinbro' on wool available, relative to the journey north of W<sup>m</sup> Walker, their wool-buyer. Scarlet naps for Derry. Samuel Stones remits 700£; "James Somervel of Baltimore accounted very rich; is conjectured he cannot live long having had a paraletic stroke."

To the same at Redcar,

Business with Greenock. Letter from G. A. Lee relative to cloth for his library. Report on Wyckoff of New York. Invoice of Saxon wool from Leipzig. Mr R. Wormald dining with an American. Holmes of Bristol has called offering 20 bags of Spanish wool.

'Mr R. Wormald has ordered the 2 Copies following to be inscribed, both addressed to you.'

<sup>1</sup> Merchant and magistrate of Leeds, who played a part in the trouble between Gott and his workmen in 1802 (Parl. Report, 1806, p. 367).

"My Dear Sir

You have forwarded to you a letter from Lord Dundas by command of the Prince of Wales,¹ who was much gratified with your attention, and that of Mess¹s Wormalds. His Royal Highness expressed himself desirous to see the Manufactory, but he will give you his reasons himself why he did not venture, for on his Return I have His Royal Highness's Permission to present you to him at Ledstone. The fact is, that the Smell of the different things used in dying &c. is apt to make him unwell.—The Duke of Clarence² is charmed with all that he saw at Leeds, and has directed me to express to you & Mess¹s Wormalds his best acknowledgements..

V. H. Taylor,

Ledstone 3rd Octr, 1806."

"Sir

I am commanded by the Prince of Wales to thank you and Mess<sup>rs</sup> Wormalds in His Royal Highness's Name, for the Cloth you have sent to him, and have it further in Command to assure you that His Royal Highness will wear with Pride such beautiful Specimens of English manufacture.

I have the Honor to be

Benj<sup>n</sup> Gott Esq.

Your obed<sup>t</sup> Humble Servant, (signed) Dundas."

108 6 October, 1806.

Transactions with Waterford, Antwerp & Hamburg, STILL, MAY & Co. (of Greenock), 2 Oct.: "... We have now to request you may forward the Bays here in preference to Liverpool.... and are much obliged by your undertaking to order them from Rochdale. If Bocking Bays are different from Colchester or Lancashire Bays you may order us a small Parcel."

3 Oct.: ".. We are very much obliged by your attention to our Views with respect to our first venture in B. Ayres, the result of which we hope will confirm us in our intention of making a permanent Establishment there, in place of a temporary adventure,.. The Field is extensive and the advantages must be proportionably so to both the Merchants & Manufacturers in this Country.. You may forward us 2 Bales of Blankets assorted as you may judge best. We consider the present adventure merely as a voyage of Experiment. Let them be sent here.. If it were not for this Consideration it would be better to send the goods for Liverpool as the vessel will be sailed before they arrive. We expect her to sail by the 15 and hope she will be amongst the first arrivals at B. Ayres or Monte Video which latter place we hope will be reduced by this time."

LAURENCE VAN SINDEREN & Co., New York, 27 Aug., acknowledge receipt of 21 Bales of woolens despatched 19 June, & send further order for spring goods to arrive by 1 May. Order made up of blankets, Bristol duffles, London duffles, 2 bales each

- <sup>1</sup> Afterwards George IV.
- <sup>2</sup> Afterwards William IV; see Leeds Intelligencer, Oct. 6th, 1806.
- <sup>3</sup> Buenos Aires was captured by the British on June 17, 1806, but was lost again on August 12, thus temporarily frustrating the hopes for a new market which was ultimately to be of such importance to Great Britain. Sir Home Popham, who was in command of the fleet, sent the following letter, which is quoted in the *Leeds Intelligencer* of September 22nd, 1806. "To the Mayor and Corporation of Leeds,

Buenos Ayres, 1st July, 1806.

Although I may [not] have the honour of being personally known to some of your corporation, I nevertheless consider it a duty to the commercial interest of Great Britain, and a respect due to you as one of its great manufactuing towns, to state in a few words, that the conquest of this place opens an extensive channel for the manufacturers of Great Britain."

containing 26 Ends Cloth 5/6-7/6, 2 bales, each containing 24 Ends Coating 3/9-6/-, 3 bales of Fearmoughts 3/10-4/-. American Government had "prohibited the Importation of all British Cloths

whose Invoice price exceeds 5/- per square yard."

JOHN SMITH & Co., Boston, 18 Aug. We have for several years past made very considerable sales of goods which were shipped to the Spanish and French Colonies....last year scarcely any demand for goods for those markets....consequently our orders

for this Season were very small.

Hopps reports payment of £4,990 for Spanish wool from 'Billboa &  $S^t$  Ander' to M. Holmes who 'says that the arrival of the New wools will not be before Christmas & that he will not offer the above mark (T) till you refuse them, will write to his house this Evening desiring them to make as Liberal a proposal as will meet the honorable payment our house makes them, he talks much and to the purpose too, if talking and deeds be regarded as one and the same thing.'

8 October, 1806. 100

Remittances from Antwerp & Amsterdam. Letter from

New York: 'Many Yorkshire agents in this country.'

Starforth, the firm's traveller at Liverpool, reports that 'Mr Ewart of Manchester gave him a list of the Houses who are doing for the B. Ayres market but he is too late....yet Mr Starforth has to call on the House of Brocklebank & Hebden¹ who has two Persons in this Country buying for Money....& will probably call on us.'

Later Hopps reports—'The 2 Gentlemen...mentioned by Mr Starforth are just come in & gone upstairs,' & at the close of the letter 'The Liverpool Gentm here have given orders to the amount of ....£3,000....one has lived 10 years at Buenos Ayres & they, as far as we understand, both go out.'

9 October, 1806.

Letter (in full) from Boulton, Watt & Co. answering enquiries

relative to guns for export to America.

Details of order placed by the Liverpool gentlemen, now joined by Mr Hebson; viz., Ladies' Cloths, Cassimeres, super cloths, saved blue cloths, Coatings, Fearnoughts, Swansdowns & Toilanetts, Blankets and horse sheets—prices, colours & quantities of each; 'also some trifling things they take for their own wear to be made up in Liverpool.' Attempts to obtain bills known to be in their possession in part payment, 'done delicately by Mr R. Wormald.'
P.S. by Joshua Dixon:—'At Mr R. Wormald's desire I

accompanied Mr Aitken & his party on Tuesday to Kirkstall Abbey and the upper mill: on our return I went with Mr A. to Armley mills. Perhaps you observed before you left home that the inner side of the wall of the upper story is giving way in some of pillars on the East side of the mill [further details] & understanding from my uncle at Burley2 that he believed you had not I thought it best to inform you.'

<sup>&</sup>lt;sup>1</sup> An error for Hebson; see the next letter. <sup>2</sup> William Gott, the surveyor.

10 October, 1806. III

Holmes offers 34 bags of the Spanish wool, mark T, now lying at Southampton at 5/8. The old Saddle belonging the Chesnut Horse to be sent to Gott by the Redcar Fishman at his next visit to Leeds. Invoice from Ben Smith, Rochdale, for the Bays for Still, May & Co., Greenock.

SAM GALTON, Birmingham: details & prices of military guns, with or without bayonet & of guns made of the materials of

military guns purchased from government as sent to the Coast of Africa "intended for the north-west of America."

"We failed yesterday in attempting to obtain the £1,700 from the Gentlemen from Liverpool, they took it all back with them excepting £41. II paid for trifles for their own wear, went off per the Mail Coach this morning for Halifax, gave them letters of Introduction to Mess<sup>rs</sup> Ben Smith, Thos Smith & W. Newall. These and the Halifax people will get the above ready Cash.'

One Harrison, from Lisbon, settling at B. Avres: looking

out for orders.

15 October, 1806.

Mr Starforth arrived at Dublin, reports on our customers-

'some confess shame, all poverty.'

P.S. by R. WORMALD: I never remember our business flatter than at present, I hope you will not hurry yourself home for your presence is not requisite. There are other houses executing orders for the Buenos Ayres Market as well as ourselves.

Business with Copenhagen.

18 October, 1806. II3 Mr Wormald will not order the Spanish wool, T, from Ball, Davis & Co.

W. BARBER & Co's opinion of the house of Brocklebank & Hebson of Liverpool: "About 2 years ago they made a very considerable Sum by a Privateer which brought in a very valuable Prize, they have since then bought vessels & now own 5, ...they are adventurous characters and dash into new things..we would as soon credit them as any house who are adventurous that way: but in an adventure to Buenos Ayres every man ought to adventure his own Property. If they want 12 months credit, we would recommend your asking for their acceptance about that time, we then think..there will be little risk, let their Adventure to B' Ayres turn out as it may.."

Fight bags of Saxon wool from Leipzig shipped at Hamburg.

Eight bags of Saxon wool from Leipzig shipped at Hamburg.

To the same, c/o G. A. Lee's, Salford, II November, 1806. This day's business has been very unprofitable; various remittances. Dealings with Perth and Coleraine.

115 To the same, c/o Hopkins, Gray & Glover, London, 11 December, 1806.

> Dealings with Newcastle, Shields, & Durham. MEYER HEINE:—"The sad news regarding Hambro' will

<sup>1</sup> Hamburg was taken by the French in the middle of November, 1806. The Leeds Intelligencer (Dec. 1st, 1806) has a passage about the detention of English merchants and the confiscation of their property under the heading .-TAKING OF HAMBURGH, AND CONFISCATION OF BRITISH PROPERTY BY THE FRENCH.

have reached you long ere this. Every communication between this place [London] and Hamburg is stopped "....asks for renewal of draft. "I hope to God that the present afflicting situation of Hamburg will soon change and that the Liberty of Commerce will be restored again.."

Correspondence with Goodall & Turner, London, respecting 6,000 Coverlets supplied, the quality of 750 not being good enough. Fresh invoice for 1,250 7/4 Red Coverlets at 4/7, £286.9.2.

116 To the same at Redcar,

14 September, 1807.

BOOTT & BENTLEY, London:—Relations with America.<sup>1</sup> "We find the general opinion that peace will be preserved but our fears are stronger than our hopes."

Vain to hope that the two governments will both be controlled by sound policy. 'The American claims involve in them what we call our Sovereignty of the Seas...they will not abandon them and...this government will not concede them,—ergo, a war must ensue'....'When you contemplate our present proceedings with other neutral Powers, is it any indication that we shall relax with the Americans....Congress is prematurely convened to decide upon it, and they are preparing Armaments. On our side we are sending out strong reinforcements and a new Commander to Canada.'

Letter from Rev. Samuel Stones, Rawdon:—Does not know if his son<sup>2</sup> is a citizen of U.S.; marriage may entitle him to citizenship; had married Miss Leston, whose father was a colonel in Washington's army, and owned plantation of 500 acres in N. Carolina.

117

21 September, 1807.

Moore of Londonderry bought 2 Bales Coatings. Mr Smith from Halifax³ dines with Mr R. Wormald to day, he thinks we won't come to blows with America; says the British officers did not act with prudence in the search for their men on board the Chesapeak, that is he meant that the object of search was not of magnitude sufficient to call forth the power the British assume over neutral flags. R. Fennel & Son have purchased for us 6 Chests Indigo.

118

23 September, 1807.

R. Hayes, Dublin, returns drab cloth sent in 1804-5, because mildewed. Takes this as accepted, 'as if he had spoken to some of the house before....you know the man...he will assume any liberty on the slightest grounds....we ought not to bear the loss.' E. Power of Cork sends order for Coatings, Cloths & Cassimeres, but fears to order to the silk warp patterns as he thinks they would stand too high.

<sup>&</sup>lt;sup>1</sup> For a brief account of the origin of the trouble with the United States, see introduction, p. 183. Actually, war did not break out until 1812.

<sup>&</sup>lt;sup>2</sup> Gott's agent in U.S.A.

<sup>&</sup>lt;sup>3</sup> Halifax, N.S.

IIQ

M<sup>r</sup> Lawson here this morning, saw M<sup>r</sup> Lee yesterday at Manchester.

BINGE of Franckfort: wishes to pay, but, as war is declared between England & Denmark, does not know what channel is left open.

28 September, 1807. 120

Reports on sixteen letters (Limerick, Rochdale, Cupar, etc.). Philips & Lee wish 17 Bales forwarded by water for next convoy to St. Petersburg.

SAML. STONES writes from Philadelphia (8 August)—about to take his Boston journey, the Prospects of War having caused a general pause to business expects to do very little.

W. Bell, Philadelphia: intends sending an order for Spring

unless the situation of the 2 Nations prevents it.

J. Somervell & Co., London:—"There is no fear of any rupture with America, that country will never risk a war on account of 'Search,' which our Government never can relinquish." Hopps continues: 'We wish sincerely there may be no war with America, Mess<sup>rs</sup> Somervell & Co persuade themselves there will be none. Mr Stones fears there will be a war, 'such is the human Mind agitated with desires and contrary passions, as its seeming interests preponderate.'

29 September, 1807.

Commissary-general advertising for tenders of blankets. Question as to whether for camps or barracks, also as to the commissary-general's powers.

**I22** 

Business with Cork, Dublin, Ayr, Montreal. American firm expects their government will again resort to non-importation system and calculates upon considerable advantage from early imports.

JOHN MABERLEY, London:—"Major Williamson, the Inspector, informs me that he will not receive a Yorkshire blanket, consequently (should I be the contractor) I could not accept your offer for making them."

'Shall Mr Starforth [the firm's traveller], who is awaiting instructions at Chichester, call on Maberley or any of the contract

London houses?

'A person belonging Messrs Hughes & Day of Manchester has been here that has to make the Scribler for Messrs Watkin & Co., wishing they might have sent to Manchester a set of your

J. Cresswell, Bridgenorth:—"I have got the Devonshire & Hereford Cows which I hope will please you when you see them; you will have the Goodness to send Robert May or his Son to the Star Inn Stafford. He will take the coach at Leeds on Thursday morning next & come to Manchester, and then get on to Stafford by the Birmingham coach the same Evening on Saturday morning early. I will give him instructions which way to drive the Cows, I wish them drove very carefully."

'Mr R. Wormald went to day a few Miles with the Volunteers1 who are gone to York for 14 days but returned, no Partner being at home but himself. There is a kind of honor I believe that calls on him to go to York.'

I October, 1807. G. A. Lee, Manchester, asks to be supplied with a pipe of Olive Oil, as they only use a small quantity & find it difficult to buy a single pipe pure. Letters contain orders for coatings, moleskins, cassimeres, blankets, coverlets. J. Thomas, London, is disappointed not to have received the Witneys, has written for a quantity per Waggon from another house. 'Mr Dixon says these Witneys were ordered in proper time at Burley Mill at prices to go away at 13/-.'

124 2 October, 1807. A correction of previous letter as regards goods for J. Thomas. His order was for 76 dozen Coverlets & 10 pairs Blankets 30/- to 36/-; much of it now ready & invoice sent. Mr Sheath of Boston called & wants to know the prices you will give him for wool this year; he has 162 packs now on hand. Chas. Evanson, Cork, complains strongly of the quality of cloths contained in a bale just to hand.

MEYER & Fues, 'Mosco,' make similar complaints: "On comparing them with the cloths from Wakefield, that we have likewise received, those at 6/- to 8/- contain within the lists 56 inches whilst yours measure only 50 or 51 ins. The prices besides are almost too large by half.. our customers sell by the Piece to small Shopkeepers in Mosco & the adjacent towns for which purposes they have different Warehouses & to have a full assortment in each of them small pieces are very convenient, therefore these customers will not always buy a long pce of 30 or 34 yards. Neither can we conscionally applaud the quality of your Goods..'

They proceed to ask for longer credit and Hopps remarks,

'We look on this letter as mere stuff.'

P.S. by J. DIXON: I have just time to annex the profits of Armley mills for last week, Sept. 26th.

•	Scribling	81	0	7
	Wages	39	2	3
3 F 111 1	( ID 1	41		4
Milling	146 Broads	21	18	,,
	8 Narrows		16	"
	34 Remitt'd	I	14	,,
		66	6	4
	Wages	10	,,	6
		£56	5	10

"On Wednesday, 30th September, the two battalions, 1,300 and 1,400 men, marched to York. The appearance of the corps reflected the highest credit upon the borough, the regiment having the reputation of being one of the finest in the country, both as regards number and discipline.." Leeds from Past to Present, William Wheater, p. 54. Extracted from the Yorkshire Owl, 1896-97.

'I fear the profits will not be so large this week for want of the Dryhouse—they are now making the large arch over the cast Iron trunks where the Flues commence—the Flues are all ready for flagging over and we hope the whole will certainly be finished next week. Saml Holdsworth says they are done according to your orders but I understand that you meant to have an area round the flues to answer a similar purpose to those at the upper mill without the Expence of an additional floor....'

Letters quoted from two London houses asking for prices for large quantities of blankets—Witney make—of specified dimensions & weights, for a contract for the navy.

Mr Wormald to Huddersfield, R. Wormald to York via

Harrogate, 'where no doubt he has concerted with his Brother.. it is uncomfortable to be left in the dark.'

126 6 October, 1807.

'We hope that Mr Trotter at your instigation will lay before Government the secret springs that induce some of its servants to exclude entirely Yorkshire Goods.. It is amazing to reflect what a host of enemies the Truths he will lay open will have to oppose before they can even reach the Ears of the great, and when they have got access thither, whether they will be regarded as of sufficient consequence for motives of redress, unless that Government draws conclusions that in its other departments abuses....equally exist, and is determined to correct them,' Orders for military cloth from an unknown house at Newcastle—supposed to be military tailors cause much perplexity. 'We could wish some of you were at home at this moment.' Preparations for Gott's homecoming: £50 in bank notes sent in this letter, and R. May (if he gets home in time with the cows) or some other careful person from the mill to go to Redcar for the horses.

7 October, 1807.

Numerous letters with remittances or orders: Starforth sends some handsome orders from Gosport. Bank balance £16,682. 'Moses Cole (Robert May not being returned) goes off at 8 o'clock this evening per Coach for Thirsk....from thence he will proceed if he meets with a conveyance to Cleveland Inn and walk to Redcar.' To the same, P.O., Guisbro', 8 October, 1807.

Remittances for £7,265 including £2,745 from Sam. Stones. 'You will rejoice with us at the contents as they relieve us from present pressure, indicate a disposition of attachment in our friends & a propensity to pay their debts, with prognosticating a continu-ance of peace with America.' Stones reports on American firms— 'Latest advices at Philadelphia from England have banished all fears of a War.' 'Mess<sup>rs</sup> Hartley, Greens & C<sup>o</sup> Pottery have just sent up that Mr Wulff of Copenhagen has wished them to inform us that he has suffered nothing from the military operations. We have known some time ago they have had a Clerk or traveller in Copenhagen of the name of Perigo at the time the Siege was going.

P.S. by J. Dixon: Profits Scribling Wages	Armley Mills, October 3 <sup>d</sup> . 58 14 2 35 12 7
149 p <sup>s</sup> milling 20 remitted	23 I 7 22 7 ,, I ,, ,,
Wages	46 8 7 9 16 0

£36 12 7

'Letter from Lord Fitzwilliam containing a card with Invitation for you & my aunt to a ball at Wentworth house on the 20th Inst.'

To the same, c/o Hopkins, Gray & Glover, Ship Agents, London, 22 May, 1808.

A letter from Wakefield states that "Wheat in 4 weeks has advanced 5/-, oats 7/-, beans 3/-, should the Embargo in America continue 3 months should not be surprised if wheat be 10/- or 20/- per qr dearer."

130 23 May, 1808.

Felton, Liverpool, solicits consignments for the Brazils. Webb, Stafford:—Lieut. Col. & Adjutant agreed to take cloaking but refuse the Jacket cloth deeming them too coarse.

J. Whitton offers a few casks of madder from 64/- to 124/-;

order for seven casks given.

Greenhow & Hewett:—Will be glad to forward our pattern card to the West Indies.

Starforth transmits £249 Irish money, business with Dublin, Limerick, Belfast.

26 May, 1808.

J. Dalby & Son offer wool at £7.5 & £5.10 per Pack. General meeting of merchants having claims on Portugal. Dealings

in pelisse cloth, blankets, fearnoughts.

Mr L. Whitton says the Antonio arrived at London: '150 Casks of Madder all for Peel Yates & Co altho' he has said in a Letter to us there was no prospect of any arrivals, this ought to be inquired into.' Whitton ready to dispose of 17 casks; an obstinate man; had said there was no more madder, if any in London would be 100% advance in price. "No prospect of any more arrivals from Holland where government was more strict than before about departure of vessels." Ship for Philadelphia delayed because of false customs entry by agent of group of Morley manufacturers. Representations to Treasury and Mr Wilberforce.

P.S. by Joshua Dixon:—Mr Oddy is making 1,000 Coverlets for Tennants 'prevailed upon him to promise us 150 per week during the time he is executing the order....after which he will engage exclusively for us.' Country makers also more likely to contract with us than with any other firm in the town.

Bill drawn at Segovia on a Bristol firm remitted from Bordeaux. Hoffman of Baltimore with R. Wormald in the warehouse. Charles Hopps says that we shall be in want of some Peach wood also Cochineal. 'We shall be happy of an opening with America.. more especially if peace be continued.. Though so desirable an object is hardly to be expected by the Mail whose arrival is daily looked for, yet it may bring cherishing hopes that both the Embargo and non-importation act will soon be done away.' Starforth remits £400 & sends more Irish orders for bloom coating, horsesheets, diapers & super Witneys.

29 May (Sunday), 1808.

Meeting of merchants trading with Russia.

Army blankets: 'The dernier ressort if not done now by applying to the commissioners will have to be done at some period or other if serving Government is continued, for while its inferior agents sub under sub in a continued chain for God knows how many links from the lowest upwards, are so very selfish ignorant and positive, an immediate connexion or at least one that would strike out the greatest number possible of those go betweens that are all fattening upon it at the expence of the manufacturer is a most desireable thing.'

Major Williamson had confessed he was in the wrong about the blankets. Starforth sends orders for coatings & cassimeres. Appleton of Boston with us; will pay for blankets: 'this Gent'n was last year rather reserved but very free & communicative at present, his Brother's cloths (supplied by us) having given great satisfaction.'

Twenty letters from America (Middletown, Philadelphia, Boston).

Samuel Stones [the firm's American agent] in two long letters (Philadelphia, 4 April, and New York, 8 April) which Hopps has transcribed on a separate sheet, discusses the political situation & the reputation of the firms sending orders. He writes of the 'great embarrasment occasioned by the Embargo' & adds 'none are now of opinion that a War with England will take place; this

<sup>&</sup>lt;sup>1</sup> This letter is perhaps the longest and certainly the most important in the series for the light it throws on the export trade of Wormald, Gott & Wormald to America. In addition to the letters of Stones, Hopps has transcribed four others in full and given details of the large orders received by this mail.

government is making no preparations for any such event.' Orders, as summarised by Hopps, include blankets, fearnoughts, coatings, horsesheets, duffles, cassimeres, cloth & kerseys.

Dudley Walsh:—"Hope we have got the prohibited Goods on board a Vessel that left America before 14 december otherwise must not go fearing the Non-importation Act will not be taken off for some time."

LYMAN, Boston, March 21, wants: - extraordinary good fabrick of Blanketing made for the Western Indian Trade.' Uncertainty of affairs, 40 bales should be shipped at once: 'time admits of no delay.' Important to get American vessel: if not, good British ship to Boston, New York if not Boston. Williams, American agent in London, consult him if fear of rupture. "If our Government see cause of war with England the People do not."

Tuckerman, Shaw & Rogers, Boston, March 28:—Anxious for goods. Willing for Sam<sup>1</sup> Williams to give guarantee for half, other half 'on our own credit' or send only half the amount ordered .... "It will be proper to save the Goods in case of a sudden rupture ..that they should be known only as your property untill they are shipped and off. secure against British capture. We coud if we pleased recover all the Goods we want through British agents residing in this Country who are daily soliciting us without a guarantee on London, this mode we have however declined.. We believe there is an understanding between your Ministers and our Government which will ultimately produce an amicable adjustment of all Difficulties.. The Embargo has already convinced many of the necessity of Commerce as the only means by which this country can maintain its present situation, consequently feeling as they do some of the Evils of war, they deprecate the Idea of having one particularly with your country.. Our Mr Shaw hopes to see you at Leeds if the Embargo is taken off."

STURGES & PARKMAN, Boston, 28 March, 1808:—"Will America join in the Contest for the purpose of subjugating Great Britain and annihilating herself?" Dissents from the temporizing policy of American government. Rupture would be unpopular with the majority of the people of U.S., however it might coincide

with party views.

138 To the same, c/o Hopkins, Gray & Glover, London,

19 September, 1808.

Twenty letters, from Manchester, Liverpool, Exeter, Carlisle, Derby, &c.; orders for blankets, fearnoughts (indigo blue & logwood blue), pelisse, corbeau cloth; 20 sheets for wool not arrived at Carlisle. Sykes has had an unpleasant settlement for the contract Blankets, had difficulty in getting them passed, complains of the

Wm. Walker, London, sends invoice for Indigo £940, Cochineal f288 & dyewoods, total £1,377.

C. West, London: writes for sample of blankets 11/4 fine, 8/4 Witney, 8/4 Yorkshire, to send in as tenders. 'Say..the price of carriage per canal & Waggon, as last year I had to pay upwards of 11/- pr Cwt. when I calculated on 9/4.'

Reply to C. West [in faded red ink]: 'the price of carriage...

is as before 6s. 8d. pr Cwt., by waggon 11/4....

R. Gunson, London:—" Please forward without a moment's loss of time..150 dozen 6/4 Black Sheets.. I much wish you would pay the freight to London..for your only paying it to Selby makes 10/— or 12/— a Bale difference to me for the Wharfingers charge 12/— a Bale for charges paid at Selby in addition to freight from Selby to London & as you charge me freight to Selby I am at a loss to account for it.. I clearly proved to your Mr Walker that I have had Bales shipped by Messrs Tennants, containing the same quantity of Goods as yours that have not come to half the money..they charging me the freight to London.. Bale no. 229 has been at Gun & Shot Wharf a long time which I cannot have till I have paid 11/8 charges paid at Hull in addition to £1 4s. freight to London and the manner I have been treated by that wharf..has determined me to write to the Shipper at Selby not to send any of my Bales to that wharf.. The trouble & extortions that people are obliged to submit to here I am persuaded drives many an order to Witney that would find its way to Yorkshire. I transmitted you an Order by your Mr Walker for 1,000 pair 6/4 rose Blankets..I have sent you 20 Ropes & Wrappers."

Hopps fails to understand order for Black Sheets; 'suppose he means horsesheets but Quere Blankets.' 'Mr Broadbent informs [us] that freight from hence to Selby is 12/6 per Ton, from thence to London 20/– per Ton.' 'At 12 a.m. a Gentleman from Mr Maberly came in his object of coming down into Yorkshire would seem to get information of the prices of Blankets. Jem was sent down with him to the Bean Ing, where he was left with Mr Read to shew him that factory.' 'John Lister is returned & brings the following report from the Market, viz.: There are a few Manufacturers at present who are provided with low wools who will make Navy Blankets at  $16\frac{1}{2}d$ ., but no quantity can be obtained at that price nor at  $17^d$  per lb. Bay wool is at Wakefield £8 10s.–£8 15s., head wool at £10 10s.

'We have this day got in about 29 ps more Kerseys for Mr Maberly. Mr Richard Wormald & Mr Wheelwright have been in the country to-day, the latter is returned from Dewsbury and that quarter brings information that the Makers there will bring into us what ever they can... price 3/3 & 3/2. Swaine formerly the Banker at Halifax now of Gomersall is doing largely in the Article. Mr R. Wormald. has bought about 80 ps. thinks himself lucky in being there early having bought up what was ready before Mr Knowles made his appearance who came soon after the Job was done.'

To the same address, London, 11 January, 1809. This morning's mail brings us 26 letters.

GEO. DOUBT, Falmouth, advises 'the arrival of the Chester-field Packet, which he supposes we shall have heard of before the

receipt of his letter...Gentlemen from Manchester & Liverpool who had been waiting the arrival having gone off express some on horse-

back some in post chaises & 4.'

Josiah Williams, Middletown: 3 Dec.: 'Exchange continues at a very advanced premium; anticipate that things will be so regulated between our respective governments as to justify sending our Order for next fall. Mr Stones went thro' here on his way to Boston a few day since in haste. If the times justify it a

few superfine Cassimeres could be sent for Summer.'

Tuckerman, Shaw & Rogers, Boston: 5 Dec. 'Order for goods to be shipped by first vessel—1,000 yds. Blue Fearnoughts, 1,000 twilled 3 point Blankets of the very lowest quality provided they are full sized to cost about 5/- each, 300 plain 3 point Blankets of the lowest quality, two Bales of Rose Blankets assorted, 2 Bales of Duffles. The Fearnought & Point Blankets are intended for the North-west Trade.. The wool must be coarse, but should be long, the Fabrick well covered & the width full.. You need not fear any irregularity in our Remittances on account of non Intercourse Laws...even if a War should be made which however there is no fear of unless declared by you.'

SAM. STONES reports that Harris has 80,000 dollars in sugar: this has no market, so he cannot pay. Other failures to pay. Congress about to pass non intercourse not only with Great Britain, but also with France, and firmly to adhere to embargo. Hence

premium on bills is 10%.

Hoffman, Baltimore. Hopes for partial removal of embargo,

but still non intercourse with France & England.

Orders from Newcastle & Edinburgh. Business with Dublin, Edinburgh, Greenock. Letters from Baltimore & Philadelphia. 'We have had with us to-day a Mr Fenwick from Crieff who has resided formerly in Antigua. has purchased a parcel amt £57.7.4; a very Gentleman Man in his manners and a Man of the world in understanding, how he may turn out in probity is to try.' Lindo sends invoice of 15 bags of Spanish Wool, £1,001.

BOLTON WATT & Co.:—'Invoice of the Metal Materials of

the lighting apparatus & R. Mc Murdo's Expences £650. 2.

J. & R. Pearson, London, hope to order a few pieces of black & blue Superfine Cloths from 20/- to 24/- per yd. for America; 'we are at a loss whether is meant West Country cloth say Wiltshire or Yorkshire; we suppose the latter is much improved of late years in quality.'

'The Mayor was here to day and had something to say which his Brother had communicated respecting having waited on

Mr Percival & Mr Wilberforce.'

142 To the same, c/o Ewart Rutson & Co., Liverpool,

13 March, 1811.

Pattern of Yellow cloth sent for quotation: supposed to be for the French prisoners. Gentleman here from North Carolina.

Boott about to embark at Liverpool for Boston. Letter inclosed from  $M^{\rm r}$  John Gott.

- To the same, c/o G. A. Lee, Salford, 15 March, 1811.

  Business with Montreal and Cadiz. Mr John Gott who is very well has nothing to say, neither Mr Wormald.
- To the same, c/o Hopkins, Grey & Glover, Change Alley, London, 6 January, 1812.
- A. C. JOHNSTONE: "...send up by the quickest possible conveyance to Mr Maberly at Paul's wharf 2,000 yards of red Cloth at 4/6 for Facings....all the brown jackets must be faced with this colour."
- J. MILES: "We are getting 7 lb. Blankets made in Essex & other places deliver'd free of wrappers & other expences,  $2\frac{1}{2}\%$  for Cash, at II/- per pair; if agreeable to you to deliver I,000 pair at same rate send them.. We can get no payment from the Commissary general on account of the 26 Coverlets to compleat the order." Maberly has sent a pair of pantaloons for a contract for grey Pantaloon cloth.

R. Wormald adds a note about the stock of red cloth, and John Gott the following: "My dear Father. I enclose a letter from my Mother. I have nothing to add but that when you see Harriett my sister Eliza wishes you to enquire what are at present

the subjects of her drawings,

Your ever dutiful son John Gott."

# The History of Gott's Mills

By W. B. CRUMP, M.A.

So far comparatively little has been said of the buildings in which Benjamin Gott carried on the woollen manufacture; nowhere has there been an opportunity to survey the external framework of his activities and to see the structures which he brought into being to house his new organisation, its machinery, processes and workers. What has been said is scattered and incidental, explanatory and even relegated to footnotes, so that the reader cannot yet realise what Gott achieved as a factory-builder and still less how rapidly his plans matured and came to fruition.

Factories and scribbling mills are as much the characteristic product of the period as the machinery within them, or the factory organisation of which they were the symbol. The poet seeing them arise "on England's pleasant pastures" might scorn "these dark Satanic mills"; even the practical man¹ believed 'that it would have been better for general society' if the woollen industry had remained as it was; the historian must see in them the expression of the age—'a dream...that is coming to birth.'

Bean Ing as the earliest and greatest factory had a very great effect on the development of Leeds, and westwards the Aire valley as far as Kirkstall Abbey has become largely what it now is from the example of Gott who planted three mills in its pleasant pastures—Bean Ing, Armley mill and Burley mill. Bean Ing served as the model for the brick-built woollen factories that after a time began to line the river banks and the new roads in its neighbourhood. It was a good model, and with its great yards or enclosed courts quite unlike the type that grew out of an old fulling mill. Armley mill was such and both it and Burley mill made use of water power; but Bean Ing showed how one could be planned partly around an engine house and partly to house numerous hand processes. The

¹ The author of 'Woollen Manufacture' in Rees' Cyclopædia, 1819—"In an art which had seen so many centuries roll on without any change, it did not appear possible to the manufacturer that any improvements could be effected; and had not the genius of Hargreaves and Arkwright changed entirely the modes of carding and spinning cotton, the woollen manufacture would probably have remained at this day what it was in the earliest ages of civilized society. That it would have been better for general society if it had so remained we readily admit; but after the improved modes of working cotton were discovered this was impossible."

application of power to spinning and weaving rendered the type obsolete; consequently many in its neighbourhood have become derelict, absorbed into foundries, or utilised for various purposes. But there they remain in unusual numbers, survivals of a century ago, and witnesses of Gott's influence.

# THE GROWTH OF THE FACTORY AT BEAN ING (PARK MILL).

The boldness of Gott's conception of a factory in 1792 is perhaps without a parallel. From the outset it was planned on a great scale and it continued to expand for forty years. Other great mills, either in the woollen or the worsted industry, grew from very humble beginnings, or arose at a later period. But Bean Ing sprang out of nothing; it was an ideal, a dream of the new age of industrialism, materialised forthwith in bricks and iron, in steam and machinery.

To realise to the full his boldness, his initiative and his supreme self-confidence it is necessary to look at Gott's circumstances. He was a young man, just married and still under thirty years of age. His sole experience was of the merchanting of cloth; of the buying of wool, or of the processes of scribbling and spinning, of weaving and fulling, he could know nothing or next to nothing at first hand. The death of his senior partner had placed him at the head of the firm, which his junior partner had only just entered. The two had youth in their favour, though the responsibility was upon Gott's shoulders and his also the opportunity to put schemes into execution if he could finance them. But the firm had in 1791 paid out £34,000 for the share of the deceased partner, and their joint capital ('Neat Stock and Profits in Trade') on January 1st, 1792, amounted to little more than £20,000, whilst they owed their creditors £172,500, with barely £174,000 due to the firm to set against it. Prudence would have said 'Go gently,' or 'Wait a year or two,' but that was not Gott's way.

It was under such circumstances that the two partners purchased in March, 1792, no less than sixteen acres of farm land on the western outskirts of Leeds with a river frontage of 200 yards. There were additional purchases from time to time. In 1795 Scott's Close was bought; in 1798 a house called Park-house

<sup>&</sup>lt;sup>1</sup> 19 March, 1792, Lease for a year by Thos. Woodcock, of Wigan, to Benjamin Gott and H. Wormald (and Release the following day) of all that close..of meadow or pasture with the cowhouse standing thereon near to a place in the township of Leeds called Droney Laith..commonly known by the name of Bean Ing (13a., Ir., 33p.); and of Horner's Close (3a., Ir., 7p.).

with closes known as Monkpitts<sup>1</sup> or Mumpitts were acquired from 'Petrus Wilhelmus Aloysius Potgeisser,' and it was here that J. G. Read took up his residence. On the opposite side was the Droney-laith estate on which, beside farm buildings, there were warehouses and a dyehouse occupied by William Close, dyer, at least as early as 1784.2 Though the whole of this estate was not purchased until 1820, Close's business and buildings appear to have been absorbed into the mill twenty years earlier. At least the balance-sheet of January 1st, 1803, has in a supplementary note an entry that implies as much.<sup>3</sup> There were further purchases of land around this central block, so that when in 1820 the estate acquired by the firm came to be divided it consisted of fifty acres, including twenty on the south side of the river. The firm itself retained the central block of fourteen acres.

The building of the factory commenced forthwith after the purchase of Bean Ing in March, 1792. Amongst the Gott Papers is a parcel of scraps that relate to its erection: delivery notes, tenders, bills, quantities, navigation charges and such things, that begin in April, 1792, and continue to October, 1793, or perhaps later. They are mostly small matters and fragmentary at that,4

<sup>1</sup> No doubt named from the bell-pits sunk for iron-stone by the monks of Kirkstall.

<sup>2</sup> See Report of the Trial of Messrs. Benjamin Gott & Sons for an alleged Public Nuisance in neglecting to consume the Smoke of their Steam Engine Furnaces at Leeds, Yorkshire Spring Assizes, 1824. The Plan of the district around the mill, included in the Report, differentiates the buildings according to their age. "Those Buildings colored Black existed forty years ago when Mr Close's Dyehouses &c now part of Mr Gott's Works were in full operation."

<sup>3</sup> See below, p. 257. The entry in question, 'Estate & late Closes £5,950,' only became intelligible on comparison with the plan in the Report of the Trial, on which the buildings of Droney Laith are marked 'late Mr Closes.'

<sup>4</sup> The following will serve as samples.

(a) May 29th, 1792. Mark Reader quotes 'Prices of Bricklayer Work for Labour.' 2 Brick Wall 6/8 Rood, 1½ Brick Wall 5/- Rood [&c].

(b) Leeds, May 7, 1792. Mary Simpson & Son..' a Proposal of Prices of Painting New Winders for 3<sup>d</sup> p<sup>r</sup> Dozen Squares every time over it Inside and

(c) Robert Thackrah: prices for plumbers' work and glazing windows.
(d) Brickwork, 1793, Jan. 21st. Measured the Brickwork at Bean Ing by Taylor & Halliday [details] £273.17.2. John Moxson.
(e) Carpenters Work at Bean Ing for Mr Gott & C° by Robert Wear.

Measured Jn° Moxson.

Roofing to Dychovers of

Roofing to Dyehouse 9,840 feet

Roofing to Dyenouse 9,840 feet

,, ,, Engine house 760 feet [&c., &c.]

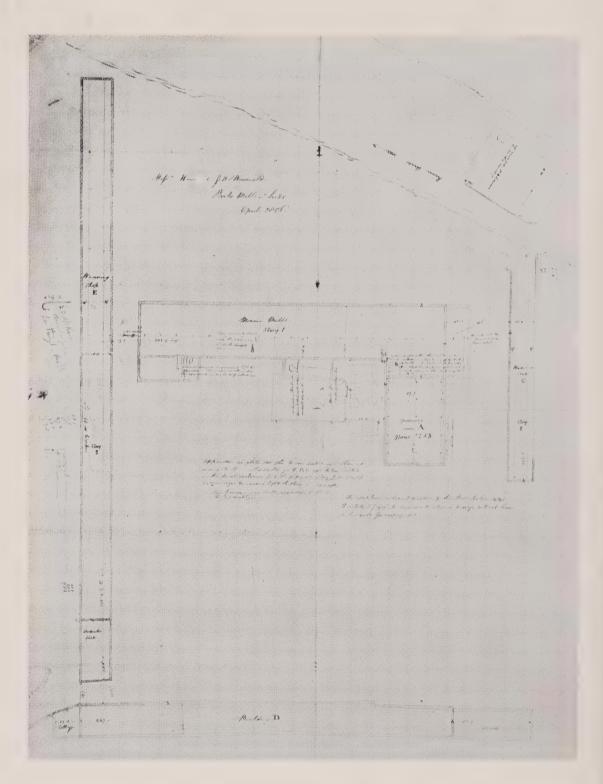
(f) There are memoranda of deliveries of bricks July-November, 1792, and of lime April, 1792-July, 1793, e.g.,

Glasshoughton, 22 October, 1792. On Bord Mark Hamshire's Vessel

31 Dozens of Lime £7.6.0 Paid 25 October, 92.

(g) Timber and deals came from Hull and Gainsboro', i.e., by water, and

there are notes and accounts from John Hall and Gam. Capes, who were shipping agents at Gainsboro'.



PLAN OF PARK MILLS, APRIL, 1806

Sections of the Spinning rooms A The ground floor is level with that in the main mill, but the atories and haven Seiter of the moissmith The tope of the retore Dep the Jagameter pils to has level with the ground floor up this mill, which is livel with the ground is the yard or thereabout The pites to in the general plans, which supplies the spinning rooms A may branch out of the upright moins at the hight I (suscetion of main will ) without handle to bern towards the room A as shown in the process. -Heaving Shop C 3 There are two horizontal pipes shick run closes under the bearing in the upperstong of this building shiels are to be supplied by a pipe coming airst the yard from the end of the main the with he ab + 50 bremens in this place but their forms are not determined rad count be done until there for the weaving Theps at Buly Will have been bried - now st the burners in without of the buildings END can be given for the same reces - the probable number of how is ment? in order that the horizontal de pipes may be proposed of proposesiges Wearing Shope to

SECTIONS OF MILL BUILDINGS, 1806

and in the absence of more comprehensive records no accurate detailed knowledge of the building operations of 1792-3 is possible.

The mill erected in 1792-3 was undoubtedly the scribbling and fulling mill with the accompanying engine house and dye house, all located on the south side of the estate near the river. How much more went up then is unknown, though it is likely that building operations continued for several years. The first survey of the property is only obtained in 1799 in the assessment of the damage by the fire on 11th August. It is evident from this that the fire was practically confined to the mill proper which was burnt to the ground. But it reveals the existence of other buildings: (I) Weaving Shops and Warehouse on the west side of the yard; (2) [Weaving] Shops and Warehouse on the east; (3) [Finishing] Workshops and hot pressing house, that may be placed on the north side; and (4) a wool drying house with another warehouse. The dyehouse and a dye-wood grinding mill are un-named, but would be included in the mill proper. The total insurance was £18,100, of which at least £6,000 was upon the stock, so that the buildings and machinery were only insured for £10,000 to £12,000, though they certainly were not fully covered.

The scribbling mill was rebuilt, doubtless on a larger scale, and extensions made to the other buildings so that by 1801-2 the vast mill yard had assumed the appearance it retained for at least 25 years, and still retains in part. Bean Ing had up to this point been treated as a whole in the Copartnership Accounts, but footnotes appended to the balance-sheets for 1800 and 1802 began the separation of the items, and from that time they were included in the balance-sheet itself. The entries in the balance-sheets are:

 1800 [I Jan. 1801]
 1802 [I Jan. 1803]

 Sundry Goods & Merchandise on hand
 Leeds, B. Ing

 Leeds £40,135
 Leeds, B. Ing

 B. Ing £54,676
 & Burley

The explanatory footnotes are:

B. Ing Stock Buildings & Machinery Estate at Bean Ing Do P.W.A. Pottgeiser	£43,575 23,000 3,000 2,625	Leeds Park Mill floating Stock Buildings at Park Mill Estate & late Closes Burley Mill Stock	£25,933 31,268 24,700 5,950
Less debts	73,000 18,324 £54,676		£96,069

<sup>&</sup>lt;sup>1</sup> See No. 64.

These two notes prove an expansion of Gott's ventures in two directions:—

- I. Since the fire the value of the buildings and machinery at Bean Ing had been doubled by replacement and extensions. The further increase in 1802 in buildings (£1,700) and in land (£325) may be attributed to the acquisition of the dyehouse and business of Wm. Close at Droney Laith, with possible additions to the buildings and plant there.
- 2. A branch of the manufacturing business had been started at Burley Mill by 1802. Only the stock there figures in the note (and later balance-sheets) because Gott only held the mill on lease from Sir James Graham. It is also noteworthy that simultaneously with the appearance of Burley Mill and the absorption of Droney Laith the factory at Bean Ing became Park Mill for the first time.

The factory at Bean Ing was now virtually complete and stabilised for a period of years. Later balance-sheets show little change in the valuation of the buildings and machinery (though there was a rise to £26,500 in 1807), until on January 1st, 1817, they were suddenly written down to £10,000, and the next year to £5,000, owing to unfavourable trading conditions.

The lay-out of Bean Ing and the magnitude of the buildings at the opening of the nineteenth century, with the additions and changes made in the next half century can be traced by the aid of published town plans or unpublished plans of the mill and the estate. There is a large scale plan of the mill still preserved on the premises, but it has decayed to such an extent that very few details are visible. In addition to the three plans chosen for reproduction there are two others<sup>1</sup> that have served for comparison with them. The earliest of all and the most informative has been found amongst the Boulton and Watt MSS. in the Reference Library, Birmingham.

The origin and purpose of this plan must first be explained. In his letter of 16 January, 1806 [No. 73], G. A. Lee invited Mr. and Mrs. Gott and Joshua Dixon to visit Salford in order to meet Murdoch and to inspect his newly installed gas plant in the mill of Phillips and Lee there. Gott had already formulated a 'Plan' for the use of the new invention of gas lighting in one or other of his mills, probably Armley mill, which was being refitted after the fire of 1805. A gas plant was also installed in the Burley Mill by 1808 or 1809, for the plans are preserved amongst the

<sup>1 (</sup>a) Plan of the estate attached to Deed of Partition, 1820.
(b) Plan of the district in Report of the Trial, 1824.

Boulton and Watt MSS.1 A little later there are similar drawings relating to Park Mill, i.e., Bean Ing.<sup>2</sup> But earlier than any of these drawings of gas plant are the documents titled "Wormald, Gott & Wormald, Park Mill, nr Leeds, April 1806," of which the one is a plan of the mill showing the scheme of lighting the various buildings (much reduced in Plate VII), and the other3 is a detailed specification of the distribution and mode of lighting, with small sectional drawings of the buildings,4 partly reproduced in Plate VIII.

Apart from the direct value of these documents as records of one of the earliest installations of gas in Yorkshire<sup>5</sup>; they reveal the main features of the factory at Bean Ing and the dimensions it had attained at this stage. The great quadrangle was already all but enclosed by buildings. The second mill-yard, however, had not taken shape; and the dyehouses of Droney Laith, which went to form it, were too remote to be lighted by gas and so are not shown at all.

<sup>1</sup> The chief of these are:

Messrs. Wormald, Gott & Wormald, Burley Mill.

J.N.G. Plan of the Photogenous Apparatus, Dec. 20, 1808.

J.N.F. Cross section of the Retorts, Dec. 16, 1808.

J.N.I. Cross section of Gasometer and Condenser Pit, Dec. 20, 1808.

J.N.H. Longitudinal section of the Gasometer Pit, &c., Dec. 20, 1808.

Hopps in August, 1809 (no. 141), reported the receipt of an invoice for £659 for the lighting apparatus, probably at Burley mill.

<sup>2</sup> J.N.F. Plan of Retorts and Gasometer Pits, July 2, 1810.

J.N.F. Section of Gasometer Pit, July 2, 1810. J.W.G. Cross section of Gasometer house; also on loose scraps of paper various orders for castings from the office to the Foundry, especially 20 July, 1810, for 3 Retorts, 1 Tar and Washing Vessel, 1 Gazometer, 15×10×10 ft., and Balance apparatus, with supplementary orders to 22 October, 1811.

3 It is a sheet and a half sheet of quarto paper, the writing filling three

pages, of which the middle one is reproduced.

<sup>4</sup> The distribution is shown in red ink, and there has been much revision and rough calculations written in ink or pencil. The plan shows the small gas plant faintly (as it is in red ink) and pinned over it was an amended drawing which has been removed and placed (upside down) in the top, right-hand corner. This amended plan corresponds with the larger drawings of 1810, and the plant cast at the Foundry that and the following year. As first planned, provision was made for four 'gazometers' of 1,000 c.f. capacity

The scheme of 1806 was only for a partial lighting of the buildings at Bean Ing. Pipes were to be laid in readiness for future use, but the installation was not to be completed until experience had been gained from the installations at Burley Mill and Armley Mill. Thus, of the Weaving Shop C, the specification states "There will be about 50 burners in this place, but their forms are not determined nor cannot be done until those for the weaving shops at Burley Mill have been tried—none of the burners in either of the buildings E or D can be given for the same reason."

"Mr Clegg, a pupil of Boulton & Watt, was in 1805 lighting the cottonmill of Mr Henry Lodge at Sowerby Bridge "—Samuel Clegg, Junr., The Manufacture of Coal Gas, 3rd Ed., 1859. The 'main mill,' i.e., the scribbling and fulling mill, on the south side, was a four-story building, 200 feet long and 34 feet wide, the several stories ranging in height from 12 ft. 7 ins. to 11 ft. 10 ins. In front of it the engine and boiler house occupied a central position. Though this mill has been reconstructed and extended westwards through the 'Weaving shop C.' the old mill still remains incorporated in the newer structure. A remarkable proof of this is afforded by the second document, the detailed specification of 1806, which states that the distributing gas pipe was to be fixed seven feet from the floor "by the side of a row of pillars which carry the beams" (with a sketch showing one pillar) +column or pillar = pipe

Many pillars of this 'cross-section' shape still remain in the building carrying the original beams. They have slender cylindrical bases and capitals and the iron is of much tougher a nature than in modern castings. Not many of them remain visible, for the majority were encased to strengthen the fabric of the mill some few years ago.

The 'mill for rasping wood' was placed conveniently in front of the engine house, so that power was available. Shortly this was the 'wood mill' and besides machinery for rasping some dyewoods it also contained stones, 'wood stones,' as they are called, for grinding others.

Projecting out from the western limb of the main mill was a three-story building used for spinning and labelled 'Spinning Rooms A.' The ground floor, or 'story I,' 9 feet high, was not to be lighted and may have been a store room, whereas the upper rooms, containing the jennies, were only 7 ft. 9 ins. and 6 ft. 6 ins. high respectively. It is noteworthy that the building was not yet called a 'spinning mill,' for a mill was a place where machines were driven by power.

The gas plant—retorts and gasometers—was to be placed in a shed between the wood mill and the spinning rooms, and there can be no doubt that it actually was set up in this corner at first.

The mill yard was flanked on either side by the weaving shops, two stories in height, but the ground floor was to remain unlighted, presumably because it was used as warehouses and store-rooms. The shop E, on the eastern side, extended right down to the river and was nearly 400 feet in length, though the end adjoining the north-eastern entrance to the mill-yard was used as a carpenter's shop. On the other side the Weaving Shop C was much shorter.

The 'Building D' which formed the northern side of the quadrangle and the frontage of the factory was 300 feet long and 20 feet wide. It was four stories in height, but apart from mention of a stable at one end and a cottage at the other, on the lower floors, there is no direct clue in the specification or plan to the main purpose of this long building. Nor is there much evidence on the point at any date, yet it is most likely that this range housed the Cropping or Dressing Shops, with stores on the ground floor and the Burling Chamber on the top floor, lighted from the roof. Of the last there can be no doubt, as a return prepared in 1858 placed the Raw-thread Burling in the 'Clock room,' numbered 81.2

This range, distinguished by a clock turret on the roof, stands to-day entire and almost unaltered, and it merits further examination, for part of it is certainly the original building of 1793–4, untouched by the fire of 1799, and the rest is almost as old, and not later than 1800. At the first glance the range produces a pleasing impression with its good proportions. No incongruous feature of later date breaks the long low lines of the façade; no upright opening interrupts the tiers of shapely arched windows and the ample wall spaces between them. Yet a closer inspection reveals irregularities both in plan and elevation, and time has wrought many slight changes in the size and position of the windows, if they were ever uniform.

The block is made up of two separate buildings, whose junction is marked by a projection, one window west of the clock-turret, as may be seen in the sketch, Plate IX, which shows the southern façade. There is also a distinct change in the alignment at this point on the northern façade, though without any projection. On the other side of the clock there is a second projection, which is only due to the wall beyond having been built considerably thicker. It at least suggests that this central portion, four windows wide, under the clock, is the oldest part of the building, for the wall is only two bricks thick. There is more to be noticed here. The original arched entrance to the mill-yard was under the clock turret, and a portion of the arch is to be seen between the first and

<sup>&</sup>lt;sup>1</sup> The heights of the stories are given as 9 ft. 1 in., 8 ft. 4 in., 8 ft. 6 in., and 6 ft. 7 in. from the ground floor upwards.

<sup>&</sup>lt;sup>2</sup> Room 84 was assigned to 'Knotting and Pearking,' and also the 'Dressed cloth drawers,' 85 to 'Knotting,' 88 was the Finished cloth and measuring room, and 90 contained the 'Dressed cloth burlers.' Most or all of these appear to have been on this top floor, or the third floor.

second window on the first floor. The remains on the northern frontage are much more evident and the walls of the archway are still complete within the building. As the four windows on the first floor of this section are the only examples on this frontage of what may be regarded as the earliest type of window, with a single-brick segmental arch, the original archway must have been bricked up and replaced by another at a comparatively early date, though it is shown in the plan of 1815. The northern façade has not quite the same harmony, for it has a wooden structure thrown out from the third floor to give additional top light for the 'mending'; but as a whole it has suffered very little change. In particular nearly all the windows remain unaltered and retain the single-brick segmental arch. The top floor appears to have been lighted for much of its length from the roof instead of by windows on this side from the start.

It is not too much to claim this Clock building as the part of Bean Ing which appeals most to the historic sense. It is Gott's conception of a factory still functioning within the walls of his earliest building. On the top and third floors, under the Clock, is to be seen the most impressive spectacle that industrial Leeds, or Yorkshire either, can present. From end to end the rooms are occupied by women and girls using their burling irons and plying their needles in 'mending' the newly woven pieces. Save for the fact that they are handling worsteds and not woollens there is not a change in tool or technique from Gott's earliest day. It is the one hand-process that survives, and it is practised in the long top-lighted chamber that Gott set apart for the work more than a hundred and thirty years ago. Where can such a record be paralleled?

The Plan of 1815, from the Giles' survey of Leeds, Plate x, shows 'Park Mills' in a rural setting. The 'New Road from Bradford' made in 1800 is the West Street of to-day. The great quadrangle of the mill remained as in 1806 except that another building had been added on the west, an additional two-story shop or warehouse that is seen (with a portion of the earlier weaving shop) on the left of the sketch. Both buildings contain the oblong windows (5 feet broad and 4 feet high) typical of the earlier period, but whereas in the older block (weaving shop C) the segmental arch is only one brick thick, the windows in the newer one have the deeper flat-topped arch, except in the rear. Within the millyard, near the corner entrance, there has also now appeared a circular, or bulbous, two-story office, and its old-fashioned bow-

windows still command every corner of it. The sketch stops short at the edge of this office. This plan also shows a building of considerable size behind the main mill and reaching to the river bank. There is a suggestion of it in the Boulton and Watt plan for the weaving shop C bends along the river but is left unfinished, sketched in pencil. A separate dyehouse was erected in 1793, and it is more than likely that it was situated here on the river side, especially as the existing dyehouse is on this site.

The chief point of difference, in comparison with the Boulton and Watt plan, is that in 1815 a second mill-yard had taken shape. The shops already noted form the eastern side of it, whilst the dyehouses and warehouses taken over from Wm. Close range along the far side and beyond to Drony Laith. A footbridge has been thrown across the river to enable workpeople living on the south side to reach the mill without having to go round by Leeds Bridge. The building near the river was also part of the dyehouses of Wm. Close, but has been extended eastwards whilst the northern side of the yard has been closed by a building continuous with the Clock buildings. This, with its small windows, has the aspect of a malt-house, but is unmistakably a dry-house, and is in fact still fitted as such. Its erection can be dated exactly for there is a memorandum towards the end of the Bean Ing note-book: "Pieces were tentered in the Top Room of the new Dryhouse on Monday Evening, Decr 5th, 1814—this being the first time of its being used."

It is to be noted that the new dryhouse was for drying cloth whilst the one existing at the time of the fire was for drying wool. For twenty years, therefore, cloth must have been dried at Bean Ing, as everywhere else in and around Leeds, in the old way by hanging it on tenters in the open air. Pieces had to be dried not only after the milling, but several times during the dressing, and the description of the processes in the note-book shows that tenters were in use. But Gott made one radical change from the start; instead of placing his tenters in the croft or field adjoining his premises, as was the custom, he set them up in the mill-yard itself and so both prevented petty thefts and secured privacy. As tenters were fifty or sixty yards long and many would be in use at once a large area was required. In this may be seen the reason for the great size of the first quadrangle.

Such was the factory at Bean Ing as conceived and created by Benjamin Gott. It was a complete and self-contained organisation for the manufacture of woollen cloth, but it was not yet a 'woollen

mill.' The Deed of Partition in 1820 described it as "All that scribbling & fulling mill and all those warehouses, dyehouses, workshops, drying houses, cottages and/or buildings called Park Mill."

There were no further additions until 1824–5, by which time the initiative had largely devolved upon William Gott, but mention should be made of the making of Wellington Road and Street and the building of Wellington Bridge in 1819 as the last important development initiated by Benjamin Gott. Characteristically he would have Rennie design the new bridge for which he was the principal subscriber.

The further expansion of Park Mill lies outside the scope of this sketch, but it seems permissible to add a few facts regarding some later buildings, even if only to trace the disappearance of the earlier ones. The first large scale town plan of Leeds, made by the Ordnance Survey in 1847, Plate XI, will serve as a basis of comparison, though most of the additions and alterations to Park Mills shown appear to have been made about 1825–30. Boulton and Watt supplied a new beam and crank engine of 80 h.p. in 1824, and a second 80 h.p. of marine type in 1829. There is other evidence of new mills being built in these years,<sup>2</sup> and that the power was required to drive gigs for raising cloth in both years and mules for spinning in 1829.

The plan shows the consequent changes. A new mill was built, in two stages, along the eastern side of the great yard in front of the long weaving shops.<sup>3</sup> The main mill was also extended westwards, and to make room for it a portion of the weaving shop on that side was pulled down. The portion still standing was sometime or other doubled in width. The making of Wellington Road had scarcely interfered with the Droney Laith buildings, and one of them can be seen on the plan. But the rest were pulled down to make way for the long building which still forms the western boundary of the second yard. This was built, presumably in 1829, to house the mules, and on the first floor there are small recesses

<sup>&</sup>lt;sup>1</sup> Mr. Smith Stocks, the Engineer at Bean Ing (as was his father), states that an engine of marine type (undoubtedly this one) was pulled out in 1891. An old beam engine, "80 or 90 years old," pulled out in 1888, is more likely to be the 80 h.p. of 1824 than the original 'sun and planet' one of 1793.

<sup>&</sup>lt;sup>2</sup> Chiefly in letters from Fairbairn & Lillie, Mill-wrights, Manchester, to Benjamin Gott & Sons, preserved with a few others by Mr. Smith Stocks and now presented by him to the University of Leeds.

<sup>&</sup>lt;sup>3</sup> These were afterwards turned into cottages, but have long since been swept away to make room for a weaving shed.

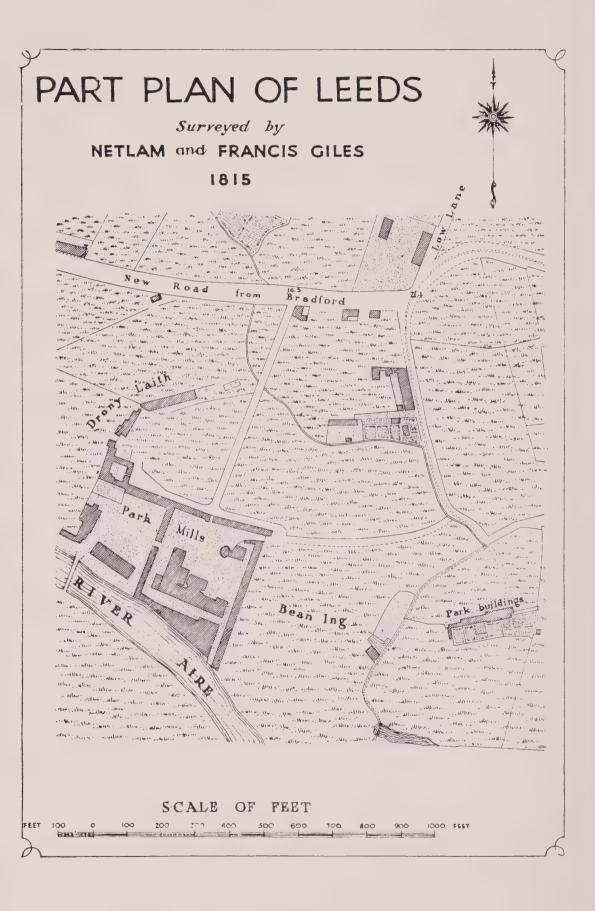


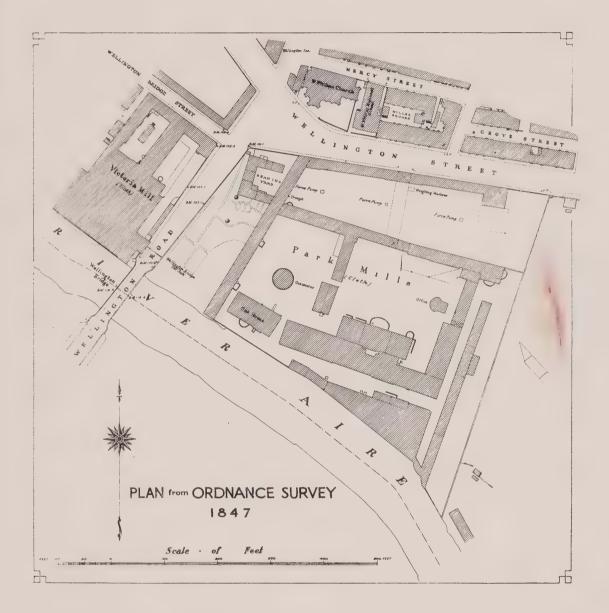


Drawing by Fred. C. Jones

THE GREAT MILL-YARD AT BEAN ING



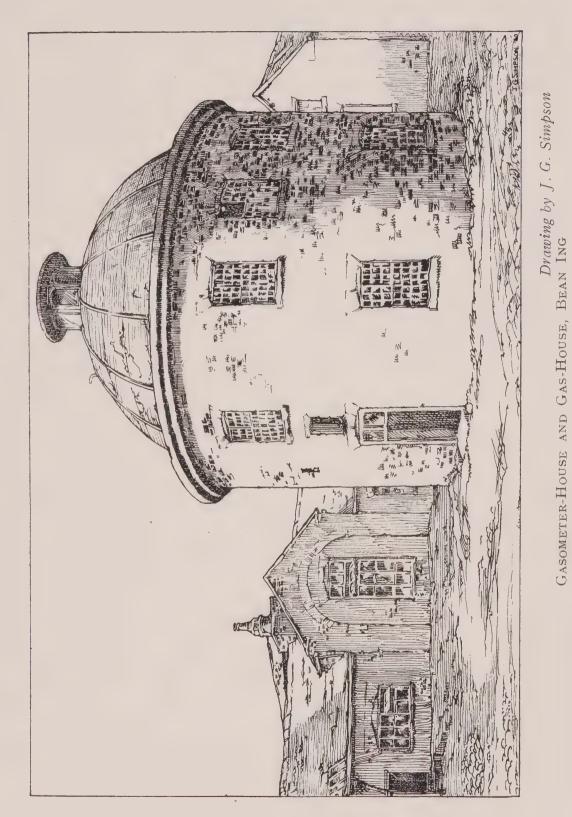




PLAN OF PARK MILLS IN 1847

(Reproduced from the Ordnance Survey Map with the sanction of the Controller of H.M. Stationery Office)







at intervals in each wall, known as 'mule-gates,' made to receive the travelling-carriage as it passed beyond the mule at the end of its journey. The old spinning room in the first yard would then be pulled down.

Within this same decade, probably in 1829, another large extension was made in the long building forming the frontage to Wellington Street. Though, as in all the buildings of this period, the upright window with a flat-topped segmental-soffit arch had taken the place of the earlier type, and invert arches of brick had been introduced to take the stresses, the entrance archway with its footways, and the open belfry on the roof as a crown to it might easily be taken for work contemporary with the earlier buildings. This new frontage created a third mill-yard between it and the Clock buildings.

But the most remarkable building of this period is the circular one shown on the plan in the further mill yard and named 'Gasometer,' with the 'Gas House' near at hand.¹ More correctly it was the gasometer-house, and now would be called a gas-holder house. Though the gas-holder has been removed the shell which housed it remains intact, and with a floor inserted serves as metal- and wood-working shops. It is a brick building, forty feet in diameter, surmounted by an iron dome and octagonal cupola. From the stone cornice sixteen T-shaped iron ribs spring to the cupola and carry the iron plates which form the domed roof. The building was lighted with eight windows or openings symmetrically arranged on the diameters, though others have been added, and there are now two doors. The windows are of the new style, eight feet high and four feet wide, and some still retain the original glazing in 49 panes. Nor has the dome been repaired, and, though protected from time to time by a coating of tar, there are now pin holes in it which admit daylight. The position and dimensions of the gas-holder can still be traced, for the stone flagging shows in places a circular joint two-and-a-half feet from the wall. This marks the edge of the tank and indicates a circular gangway three feet wide between the bell and the wall of the building. The holder would, therefore, be about thirty feet in diameter and perhaps twenty-five feet in height. No other signs of the original use of the building can be traced within it, except perhaps twelve rectangular openings, little larger than a brick, at regular intervals close to the stone coping,

<sup>&</sup>lt;sup>1</sup> Both it and the other buildings of this decade are shown on the *Plan* of the Town of Leeds and its Environs, by Charles Fowler, 1831.

which may have served to carry brackets for use with the counterpoise weights.

The 'gas-house,' or retort-house, apparently replaced the earlier building on the site. It is distinguished by an arched gable in the front and rear, and the flue stack is on this line. The flagged floor is supported by brick piers and access to this space for stoking the fire or fires is gained through two low openings at the rear. The retorts would be near the flue-stack and the archways in one or both gables may have been open to the air. There are, elsewhere, signs of one or two circular openings in the flagged floor where it is still exposed, and these probably indicate the position of dye vats, for the building was in part a dyehouse. Though Gott had in fact abolished the heating of dye vats by separate fires soon after 1800¹ in the main dyehouse, this one was too remote to be supplied with steam unless generated on the premises.

The point of view of the sketch on Plate XII has been chosen so as to show both these buildings, here described and illustrated for the first time. There is no reference to their erection in the Gott Papers, no letters or drawings relative to them, so far as is known, in the Boulton and Watt Collection at Birmingham. Just one undated paper in the former, giving a summary of the number of windows and squares of glass in the buildings at Bean Ing, enumerates:

It is sufficient to establish their purpose and to show that the gashouse was also used in part as a dyehouse.

No description of the buildings at Bean Ing could ignore the remarkable structure of the Gasometer House which, hidden away in the inner yard, is almost unknown even in Leeds, and its original purpose quite unsuspected. No excuse is needed for describing it and the gas-house, for in age and character they can scarcely be matched by any building in the country erected for the production and storage of coal-gas.<sup>2</sup>

<sup>1 &</sup>quot;For more than twenty years past Mr Gott had reduced his dye-house chimneys from forty-two to one by heating the vessels with steam generated in one or more boilers, on a plan suggested by the late Mr Watt"—Report of the Trial, etc., 1824, p. 18.

<sup>&</sup>lt;sup>2</sup> By the courtesy of Mr. H. J. Hodsman, of the Gas and Fuel Department of the University of Leeds, Messrs. Clayton, Son & Co. Ltd., constructional engineers, of Hunslet, have had their attention drawn to the existence of Gott's gasometer-house, which was quite unknown to them. They state that

## ARMLEY MILLS.

Bean Ing is in itself a worthy and sufficient monument of Gott's life-work, but it was not big enough for his energy and his resources. Within ten years he had commenced operations in two other mills higher up the Aire where water-power was available. Probably at the outset, before he bought the Bean Ing estate, he had contemplated erecting a factory on the Aire about mid-way between Armley mill and Burley mill. This seems the most likely explanation of the fact that as early as 1793 he is shown as the owner of land along the right bank of the river below Redcote, from the one bend where his toll bridge was built later to the other bend at the damstones of Armley mill. This was Gott's earliest association with Armley and it accentuates his predilection for this stretch of the river which could supply ample water-power.

Possibly difficulties over water-rights decided Gott not to build a new factory here and led him to watch his opportunity to treat with neighbouring landowners. How he commenced at Armley mills as the tenant of Thomas Lloyd some time about 1800 has already been described.<sup>2</sup> After the fire by which they were destroyed in 1805 Lloyd apparently agreed to Gott's rebuilding them and then sold them to him in 1807. They were then described as "those capital and ancient Fulling Mills, Scribbling Mills & Corn Mills called Armley Mills otherwise Burley Mills<sup>3</sup>...and late were in the occupation of Israel Burrows & now are in the possession of Benjamin Gott and Luke Hardwick." The latter was the corn

such buildings are used as a protection for holders in severe climates, and they have made and erected a gas-holder 168 ft. in diameter which is housed in a circular building at Stockholm. But they were only thought necessary in this country for a short period about 1820–30, and though Mr. Leonard Hartley, M.Inst.Gas E., one of their directors, has studied the early history of the industry, and has sought for examples of gasholder-houses, he has only found them in two towns. In Warwick a pair of octagonal houses form part of the entrance gateway to the gas-works, after the style of lodges or toll-bar houses. These are in two stories and finished, as at Bean Ing, with cupolas for the escape of fumes, and were also fitted with ventilators in the openings now fitted with windows. They are stated to have been erected before 1822 when the Warwick Gas Company was incorporated. The other example is at Inverness, where a plain rectangular building formerly contained two circular holders. The engineer's drawings of these, in plan and elevation, are dated 1826. Mr. Hartley also finds that a further example exists at Banff, similar to the last.

- <sup>1</sup> Plan of the Township of Armley, 33 George III (in the possession of Messrs. Newsome & Gott).
  - <sup>2</sup> See p. 5 and advertisements nos. 154 and 155.
- <sup>3</sup> This alternative name has proved a stumbling block, obscuring the fact that Gott also held another Burley mill near Kirkstall. It is now clear that Burley mill in the Gott Papers always refers to the latter.

miller and for him and his trade there was no longer any room here.

From this time Armley Mills were the property of Gott alone. There is a cash-book showing the cost of the rebuilding and equipment and some of the more interesting payments relative to the latter are given below.<sup>1</sup> From these it is evident that they continued to be fulling and scribbling mills,<sup>2</sup> and they remained such until after the dissolution of partnership in 1817. Unlike Burley mill, Armley was not named in the agreement for dissolution and the stock never appears in the *Accounts of Copartnership* until the balance sheet for 1818 (I Jan., 1819).

Armley Mills remain much as they were left by Gott, and are in every respect a striking contrast to Bean Ing. Every feature of them proclaims them to be a scribbling mill developed out of an ancient water-driven fulling mill. They are stone-built, and the main mill, bigger and taller than once it was, is set astride the mill-goit or mill-race. They are remote from the hamlet or hamlets which they served, for they are down on the boundary stream between the townships. They are hidden under the bluff of Dun-

,	<sup>1</sup> Cash Account at Armley Mill.	
	1807	£, s. d.
(f. 36)	Feb. 7 By Supper—Stocks starting	12 19 4
(f. 43)	Prince for Clocks .	12
, , , , ,	Mr Smith's, Chesterfield [Griffin Foundry]	1315 6 7
	Mr Lane, Nottingham	3074 12 6
	Butlers & Beecroft's Forge [Kirkstall Forge]	709 11 0
	John Gaunt Jun <sup>r</sup> for Dying Pan	15
(f. 44)	Bolton & Watts Au <sup>r</sup>	129 15 5
	Stocks Expense making	322 I $1\frac{1}{2}$
	Fenton, Murray & Wood	100 10 0
	J. Sturges & C° Bowling Ironworks	67 7 0
	Expense of Machines making	$532 \ 6 \ 1\frac{1}{2}$
	Thos. Sellers, Cardmaker	299 4 0
	R <sup>d</sup> Haywood Do	21 17 0
	Ab <sup>m</sup> Fairburn Do	1142 3 0
	Josa Goldthorp Do	181 18 6
(f. 45)	Wages paid for Corn Mill covering with Sheet Iron	53 5 9
	Expense of Gas lighting	978 13 o
(0 -1)	—— Extra Machines	572 11 10
(f. 46)		676 12 6
	A Summary on another page gives:	
	Building £10,500	
	Shafts, Gearing & Wheel, Gas	
	apparatus, Boiler & Steam pipes 5,000	
	Machines & Cards, Stocks &c 8,000	
	Office of the second se	
	23,500	
	Production and Produc	

<sup>&</sup>lt;sup>2</sup> See also Dixon's returns of the weekly profits in October, 1807, pp. 246 and 248.

kirk Hill and are inaccessible even more than of yore for they are now cut off from Armley by the railway as well as the eighteenth-century canal. The damstones are a considerable distance up stream at the bend, so that the site is an island of some length between the wide goit and the wider river. The one approach is a by-road from Burley across the flats to the point where the tailgoit joins the river. Here a bridge across the latter gives entrance to the spit, the steaner or steanard of the ancient deeds. The other approach from Armley is a by-road under the bluff and over the canal bridge into the mill-yard. There between the canal and the river the buildings are all clustered. Within their own territory Armley Mills are a thing aloof from the modern brick-built mills and engineering works that abut upon it.

## BURLEY MILL.

The Leeds Directory for 1817 states that Benjamin Gott & Sons in addition to their establishments at Drony-Laith and Armley had "another near Kirkstall, used principally for the manufacture of blankets." There is scarcely another published reference to this third mill, for it is not named in later issues, e.g., in 1822. But a modern gossiping guide-book¹ on Armley and Gott's association with it, supplies a clue to its identity in a remark: "Redcote in the early 1800's was comparatively a busy way for hundreds of Armley folk who worked at the Dobbie mills." Burley mill is to-day popularly known in the neighbourhood as the Dobby mill whenever the name arose.

The origin of Burley mill may be traced in the Hopps Letters from 1798 to 1800 under the name of the Kirkstall mill and there are later references to it, as the 'upper mill," i.e., relative to Armley. Richard Wormald wrote in 1799: "I think they proceed slowly on at the Kirkstall Mill, they have turn'd the upper Arches & wou'd have had the others done also, but we have had so much rain that the Mill Races are perfectly under water at present." The letter from Atkinson, copied by Hopps [in no. 99], with its references to Mr. Graham, gave a further clue which sufficed to clear up the whole position. It was James Graham who was building Burley mill for Gott, and then leased it to him, probably for a term of twenty-one years. Actually Burley mill is the lowest of a chain of

<sup>&</sup>lt;sup>1</sup> Armley through the Camera, T. Kirkby, 1901.

<sup>&</sup>lt;sup>2</sup> The letters are nos. 90, 95, 99, 101, 110, and 124.

mills—the Abbey mills, Savings or Savins, St. Anne's and Burley—on a long mill-goit or race that begins near Kirkstall Abbey. The land is all part of the Cardigan estate; James Graham, who was the Earl's agent, apparently took it all on a long lease, continued the goit which supplied the ancient Abbey mills and built one or more mills upon it,¹ the first being Burley mill. He told the Committee of the House of Commons 'I built a manufactory and let it to a great manufacturer,'² and no doubt he was speaking of Burley Mill and Gott.

The Accounts of Copartnership show 'Burley Mill Stock' in the balance sheet of 1802 for the first time and it appears regularly up to 1820 and then ceases. From the start Burley mill was designed and used for the manufacture of blankets and included weaving shops as well as the scribbling mill driven by a water-wheel. These weaving shops were to be lighted by gas in 1806 before the Bean Ing installation was completed.<sup>3</sup> There is a reference to the making of Witney blankets at Burley in 1807,<sup>4</sup> and a remarkable blend of wool for weft of army blankets is set out in the note-book under the title 'Blanket Manufactury at Burley Mill, April 1811.'

Burley mill is now occupied by a firm of leather curriers, Messrs. Richard Nickols, but one man is still employed there who knew it as a woollen mill. The scribbling mill, of stone, six stories high, was destroyed by fire in 1918, though another building stands on the same site, and the old water-wheel has gone, but otherwise there is a good deal reminiscent of Gott's day. Particularly is this true of the range of stone buildings on the roadside, though the Kirkstall road has been made and the ground level raised since it was erected. It consists of a central gateway and office block, flanked on either side with a row of cottages, eighteen in all. These faced the yard and possessed gardens within the yard that remain still on the one side. The gateway is characteristic and altogether pleasing. A clock-face is set in the pediment above the archway, both within and without the yard, and the old clock, made by

<sup>&</sup>lt;sup>1</sup> His son Sir Sandford Graham held on lease at least three of the mills and nearly 300 acres in Headingley in 1837. See *Book of Reference to a Plan of Headingley-cum-Burley*—made in 1837 by George Hayward. Thoresby Society Library. The fourth, St. Anne's Mill, is not named, but is known to have been occupied by J. & E. Brooke at an earlier date.

<sup>2</sup> Report of 1806.

<sup>&</sup>lt;sup>3</sup> See above, footnote p. 259.

<sup>4</sup> Hopps' Letters, no. 123.

James Prince,<sup>1</sup> still tells the mill hours. Above the roof rises an open octagonal belfrey, crowned with a wind-vane and a large figure of a goat as weather-cock.

At the ends of this range and at right angles to it are the similar buildings that served as weaving shops. The mill does not close the rectangle but lies beyond it, astride the goit. The latter continues for a field-length and then joins the river, and at the confluence close to the Kirkstall road Gott erected his toll-bridge, making the road from Redcote down to it as an approach from Armley. The bridge was moved to its present position a little lower down, sometime before the Ordnance survey of 1847, but the Half-penny toll-house still exists at the earlier site.

<sup>&</sup>lt;sup>1</sup> He supplied the clocks to all the three mills, and the works of the old one at Bean Ing are now at the University of Leeds.

V

## The Records of Mill Practice

## (i). THE BEAN ING MILL NOTE-BOOK

BY ALEXANDER YEWDALL,
Textile Department, University of Leeds.

The Bean Ing Mill Note-book is a small volume,  $7\frac{3}{4}$  inches long by 5 inches wide, with stiffened outer covers of a blue-grey shade. Its pages have been numbered by a one-time owner, and actually comprise with the covers 84 folios, though two of them bear the same number—65. Two of the original leaves have been cut out—one between ff. 2 and 3 and the other between ff. 65 and 66; the margins remaining show that they had been written on before their removal from the book. As the missing folios do not break the continuity of the numbering, the pagination, obviously, has been done after the little volume was filled.

As there is no name on the cover, or at the beginning of the book to denote ownership, it is not possible to determine by whom it was compiled, but it seems feasible to suggest that it was started by someone entering the mill as a learner or apprentice, and that he had been instructed to make notes regarding the machines and processes he was studying, and then to submit them for examination and correction to a person of position and authority in the factory, responsible for his tuition.

This assumption is supported by the method in which the arrangement of the subject matter was apparently planned when the book was started, and, also, by differences in the handwriting and phraseology. We see the large round handwriting of the schoolboy and the small precise hand of the man of mature years; we can, also, recognise the boyish method of expression, and the concise statement of the instructor, who may sometimes be heard dictating his rules or methods to the youth.

There is distinct evidence that this instructor was Joshua Dixon, for his handwriting, which occupies a good deal of space throughout the book, can be identified from the specimens preserved in the Hopps Letters. His actual signature, also, appears at the head of one of the folios (f. 33), being inserted apparently for the purpose of claiming the authorship of an experiment on heating the dye-vats by steam made by him and a Wm. Pritchard

in 1800, which the learner had been instructed to copy from the original note.

The first entry in the book is a numbered list of 29 operations required to convert the raw wool into finished woollen cloth. It has, apparently, been dictated to the learner as his first lesson, with the object of giving him a preliminary idea of the different branches or departments of manufacturing. It almost seems as if it were intended that the learner should build up a reference book with the subjects arranged according to this list, for notes on wool and wool sorting, carding, slubbing and spinning, and calculations relating to warping and weaving all appear in more or less their proper order in the first half of the volume, while explanations of various processes of cloth dressing or finishing occupy an appreciable portion of the latter half. The scheme, however, if indeed there ever was one, broke down, and the book was gradually filled in with the technical details, or 'makes,' for weaving the many kinds of fabrics produced at the factory, together with the lists or scales of payment for the various processes of manufacture. In odd corners, also, there are miscellaneous notes relating to many detail requirements of the mill.

There are two very important entries which afford a definite impression of the working capacity of the factory, one of these being a census (f. 79) of workpeople employed on the 29th of September, 1813, and the other (f. 61) being an estimate of the mill profit for the year 1815. As these, as well as many of the notes relating to 'makes' of fabrics and their prices, are in Dixon's writing, it seems not unreasonable to assume that the book had left the hands of the learner and had come into the possession of Joshua Dixon, who used it, in his capacity as 'inside manager' or supervisor for his uncle, for jotting down details relating to the work of the mill, until, in course of time, he had compiled what may be fittingly described as a 'woollen manufacturer's vade-mecum.'

If the book came to be what it is in some such way as this, there can hardly be any doubt that the pupil who commenced it was one or other of Gott's sons, and most likely the eldest one John. His name begins to appear in the closing letters of the Hopps series during 1811–12, when he was twenty years of age, and in 1815 he was taken into partnership. If he wrote the first few pages of the book it could only be when he was still in his teens and just beginning to get an insight into the manufacture of cloth, *i.e.*, about 1808–10. None of this elementary material is

dated, but the more advanced or technical memoranda often are, and the dates almost all fall between 1811 and 1815 with supplementary additions or revisions as late as 1825. The earlier of these he may have compiled, to gain further knowledge of the organization, at Dixon's request, and then he ceased to add to the contents and his note-book became Dixon's mill-book. Possibly by 1811 John Gott had passed out of the mill into the counting house at Burley Bar and so came to be mentioned by Hopps.

Benjamin, the second son, was only a year or two younger than John and became a partner in 1816. He remains a very shadowy figure, as he died the next year, and there is no reason for attributing the note-book to him rather than to John, though there is nothing to rule him out.

The contents of the book afford, not only a vivid picture of the Mill and its working, but also a collection of technical and economic data relating to the woollen industry of the period under review, that is undoubtedly unique. Such a collection of detailed information could have been compiled only in a very fully equipped and wellorganised factory; and it is very probable that many of the items, especially those relating to the construction of cloths, had never before been recorded in writing.

The Factory of Bean Ing was a large consumer of Spanish wool, which was used for producing the finest qualities of cloths, and (on f. 2) there is an interesting note (in Dixon's writing), evidently copied from some newspaper, stating the amount of wool imported during the years 1813, 1814 and 1815, with the prices obtained both abroad and in England. The figures are illuminative in showing how rapidly the manufacture of fine woollens was expanding with the advent of power machinery—in three years the imports were more than quadrupled. The prices given form an interesting commentary on the changing economic conditions in Europe; in 1813 England was paying six shillings per pound—twice as much as the price obtaining on the Continent, but in 1815 the price had fallen to four shillings and sixpence in London, and had risen to that amount abroad. Curiously enough, this note, with slight alterations, appears again towards the end of the book, the wools being then referred to as Spanish and German, thus indicating the changing source of supply.

Spanish wool is treated in considerable detail. Apparently the best wools bought by the firm came from the estates of the Infantado and the Duke of Alva, for there is a note (f. 2) giving details

about them. This is followed by a description (f. 3) of the quality marks and method of sorting Spanish wool generally. One sentence, relating to the quality marks, deserves comment: "..... some years ago it was very simple to buy wool by these marks, but now it is necessary to buy entirely by the Eye, there being no dependence to be laid upon the Marks."

The sentence, however, has been struck out, the writer thinking, possibly, that it was too sweeping a statement to make. To-day we realise that the comment was probably quite justified, and, in fact, marked the beginning of Spain's decline as a producer of fine wool. English wools, naturally, are in great evidence throughout the book, and there is a long and critical description of those used at

Bean Ing (f. 3), which, from the phraseology of the first sentence, has no doubt been written for the express benefit of the learner:

"The wools grown in the different counties of England are so very different in their nature and properties that I must treat a little on the qualities of the wool grown in them."

Throughout the book methods of calculation, dealing with the

many phases of manufacturing are given; and the first of these shows how to ascertain the actual cost of a wool after allowing for the loss of grease and dirt in scouring, and fibre sinkage during processing. It is in Dixon's writing, and appears again (on f. 59) with an interesting comparison between Spanish and English wools and particulars relating to army cloths.

The learner must have spent a considerable time in studying the The learner must have spent a considerable time in studying the processes of yarn making, for there are many notes in his writing—with frequent corrections and additions by Dixon—relative to carding, slubbing and spinning. There is also one reference (f. 67) to the willow. The notes relating to the scribblers and carders are very precise, and give particulars of their construction (f. 65) and working (f. 9), with rules (ff. 6 and 8) for calculating the size of the carded slivers; all so clearly expressed that we might almost be reading from a modern textbook.

There is, in addition, a detailed specification (f. 68) of the card clothing required for one of the double carding engines. This was evidently supplied by Abraham Fairburn, of Hightown, near Heckmondwike, for there is the copy of an invoice dated September, 1811 (f. 69), which varies only in slight detail from it.

Two folios (ff. 5 and 66) give particulars relating to slubbing, the former showing how to reckon the mill profit on the process, and the latter giving details of the machines and their output.

There is an interesting note (ff. 11 and 12) explaining how to operate the spinning jenny, which is stamped as being the work of the learner, for the brief description is followed by what appears to be Dixon's concluding comment: "..... but these things are best learnt by watching the men."

From the notes relating to the yarn-making processes, and details extracted from the list of workpeople, we are able to ascertain the numbers of the various machines, and also to obtain an approximate idea of their daily output. The plant consisted of three willows which supplied the material for the seven scribblers and eight carders. Each of the scribblers was capable of delivering 9 stones (144 lb.) of Spanish wool, or 15 stones (240 lb.) of coarse wool per day of eleven hours. The carding engines delivered about 15 warterns<sup>1</sup> (90 lb.) of cardings. There must have been ten slubbing billies, each capable of producing at least 15 warterns. Each billy was mounted with fifty spindles, making a total of 500 spindles to deal with the carded material. As 53 spinners are enumerated in the list of workpeople, there was, presumably, that number of spinning jennies, each containing from 40 to 80 spindles in order to cope with the amount of material from the slubbing billies. This number does not include the two mule spinners, of whose machines we have no particulars.

The technical terms 'skein' and 'wartern' call for explanation, for, together, they formed the basis on which both the slubbing and yarn were made and paid for. The size or thickness of both materials was expressed as the number of skeins, each 1,520 yards long, contained in a wartern of 6 lb., so the greater the number of skeins there was in a wartern the finer was the slubbing or yarn. Both these terms, by-the-way, are in common use to-day in the Leeds woollen trade, though the unit length of the skein has been changed to 1,536 yards.

The slubbers were paid according to the number of skeins contained in a wartern, and there is a list (f. 5) showing the rates of payment which graduated from 2d. per skein per wartern for a 4-skein slubbing to 1/6 for a 30-skein slubbing. The average wage (f. 65) earned per day was 6 shillings for slubbing about 16 warterns to  $8\frac{1}{2}$  skeins.

There were various methods of paying for spinning. All warp yarns were paid for in exactly the same way as for slubbing (f. 18), but weft was paid for, either according to a wartern of fluctuating

<sup>&</sup>lt;sup>1</sup> In the note-book the spelling is usually 'watern.'

weight (f. 17) or by the lb. Mr. Read, Batley Royston and B. Horsfall had separate scales of payment which differed slightly in detail. In 1819 wages were considerably reduced, and on folios 17 and 18 the new rates are entered under that date. Batley Royston paid 'per lb.' (f. 30) for spinning Swansdown weft.

Though the list of workers tells us that there were 144 weavers

employed in the mill, there is only one record relating to the loom itself, and that (f. 80) notes the purchase of eleven handlooms from Evidently the 'manufacturers'—other three different makers. than Mallelieu—had brought their own looms to the factory. The looms in question, however, were bought, presumably, by Gott, and their exact location in the mill is stated.

Evidently loom furniture, or fittings, were supplied by the firm, because the census of workpeople includes a slaymaker. There is, also, a long list (f. 71) dated December, 1811, of "Benj. Horsfalls assortment of Slays when Stock was last taken which may serve as a guide to know the different kind of Slays made use of in manufacture of low Cloth." The list enumerates 430 separate slays and comprises 41 sorts. It is illuminating in giving us an idea of the firm's activities in the making of low guality cloths, of which there firm's activities in the making of low quality cloths, of which there were apparently 41 different varieties as regards width and weight.

A feature of the textile industries generally, and of the woollen industry in particular, is found in the many distinct systems that obtain of expressing the 'sett,' or method of spacing the threads and picks in the loom, and calculating the amounts of yarn required for the warp and weft in weaving. Many different systems, all of obscure origin, are found in the West Riding; Leeds, Bradford, Dewsbury, Halifax, Huddersfield and Holmfirth all possess their own methods of statement and calculation.

In the Leeds system, in addition to the terms skein and wartern already explained, we get 'porties,' 'quarters,' 'strings' and 'woves,' and with the exception of the last named all are in common use to-day. The portie indicates a unit group of 38 warp threads, a quarter is 9 inches (a quarter of a yard), a string is 10 feet of warp, and a wove is 2½ yards of warp. In a statement of the 'make' of a cloth, the number of porties determined the number of threads comprising the warp; the number of quarters indicated its width from list to list; the number of strings expressed its length; and the woves represented units of warp length into each of which a definite weight of weft, usually in ounces, was woven.

The local system was explained to young Gott in a very thorough and systematic manner by a series of eight calculations, two of

which (ff. 12, 13) are given. The series affords a remarkable example, for that day, of systematic teaching, insomuch as nearly all the separate problems are linked together by using the answer of one question as a factor in the next. Also, the learner has been required to prove the correctness of his answer by working out the problem in a different way.

Two entries deal with the sizing of the warp, necessary to give it sufficient strength to withstand the strains imposed during weaving, the first (f. 49) stating the most suitable conditions for the process, and the second (f. 65 bis) a recipe for making size.

The factory at Bean Ing became famous very early on in its history for the large variety of cloths it turned out, and amongst the notes are full and comprehensive details for making many of them. These particulars, in many cases, give the kind and quality of the wool used together with the ruling price per pound, the counts of the yarn and the sett in the loom, and also the price per yard of the cloth.

The making of broad cloths formed the most important section of the firms' activities, and these fabrics were made in a large variety of widths and weights, there being no less than 41 makes recorded. They were mostly produced in Benjamin Horsfall's looms (whose list of slays used in weaving them has already been noted), though Mr. Read was also responsible for making a few of the common qualities.

Blanket making formed a very important section of the firm's work, and there is a most interesting record (f. 58) of a monster blend for spinning weft for army blankets (called Camps) made at Burley Mill in April, 1811. It was evidently considered so important by the compiler that it was repeated in a summarised form (f. 60), a pencilled note at the foot stating that "The above 34 packs produced 1,413 Waterns of Weft when mixed with 623½ lbs Oil." From this record we learn the names of some of the merchants from whom the firm purchased their English wool, viz., T. Smith, J. E. Pease, Whitlock, Raines, Nottidge, Curling & Co., and Porter & Co.

Though wool prices for manufacturing purposes are quoted 'per lb' throughout the book, English wool was sold by the stone of 16 lb., but more often by the 'pack' of 240 lbs. The latter measure made reckoning easy for, as there are 240 pence in £1, "a penny a pound is a pound a pack," to quote a common expression of the wool trade of that day. The blanket blend is priced 'per pack,'

so by inverting this method of calculating we discover that the average price of the wool was nearly  $11\frac{1}{2}d$ . per lb.

The manufacturing details for making both army (camp) and navy blankets are given (f. 64); six pairs of the former weighed 51 lb. and one pair of the latter weighed 8 lb. The dimensions were almost the same, each blanket measuring about 81 inches in length and 66 inches in width.

The makes of sixteen other varieties of blankets are recorded (ff. 62-64), of which several are given on page 296. They ranged from 75 inches long by 65 inches wide, weighing 5 lb. per pair, to 144 inches long by 135 inches wide, weighing as much as 26 lb. per pair. The smaller blankets were made largely for the export trade, and were called 'Foreign Orders.' 'Little Nines' were made slightly under nine quarters wide (actually  $8\frac{1}{2}$ )—hence the name, and another variety was described as 'Whitney,' evidently made to compete with the Oxfordshire Witney blanket.

Coverlets were small blankets, and particulars of six makes are given (f. 64). It will be noticed that the warp threads are reckoned by the score instead of by the portie, and this seems to indicate that the manufacture of these fabrics had been introduced from another district.

One of the most interesting items in the book is the record (ff. 69, 70) relating to the pelisse cloths made by Mr. Read. It is dated December, 1811, and not only gives the weaving details, but states the quality and price of the wool and the cost of the finished cloth. Though the details are quite complete in their original form they are shown below rearranged and tabulated in order to afford the reader a better idea of their relative values.

Quality of Wool	Size of Warp Skeins	Weft	No. of I Warp	Weft			Price of Cloth per yd.
Royal Prime	24	22	84-76		11	4/8	14/- & above.
Prime (& R.P.)	2.4	22	74-70	70	11	4/	14/-
	24		74-72				• 1,
Choice	23	21	70	67–68	II	3/6	12/-
Super	22	20	68	65	II	3/-	II/-
Ďо.	22	20	67	63-64	II	3/-	10/6
Head	21	19	64	61-62	II	2/6	9/6
Do.	21	19	62	58	II	2/6	9/-
Downrights	20	18	6 <b>o</b>	55-56	II	2/-	8/
Do.	20	18	58	54	II	2/-	8/-
Seconds	$17\frac{1}{2}$	$15\frac{1}{2}$	56	51	II	1/9	7/-

The table clearly defines the underlying principles of fabric structure, by showing the relationship between the quality of the wool, the size or counts of the yarn, and the spacing of the threads and picks. Fine quality wools produce thinner yarns which, obviously, can be placed closer together in weaving than is possible with the thicker yarns made from coarser wools.

It may be pointed out that in the record of these fabrics the amount of weft is stated in porties (like the warp) instead of ounces per wove—the usual method which would be used in practice.

Mr. Read also made broad cloths of all qualities, double milled drabs, mediums, ladies' cloths, and rateens.

Toilinets (f. 48) were another class of fabric that were probably first made in Leeds at the Bean Ing factory. They were made with a cotton warp and a Spanish or fine English wool weft. Batley Royston wove them, and his method (f. 64) of weighing out the cotton yarn, and calculating its equivalent size in woollen skeins is given—necessary on account of its different standard of measurement.

Cassimeres were made by Batley Royston and James Mallelieu. There were many grades of these fabrics, of which full particulars (ff. 42, 43 and 45) are recorded.

Batley Royston also wove four qualities of 'Plains' for single milling, double milled plains and kerseys (ff. 46, 47).

Army cloths were made from low quality wools of approximately the same price as for the camp blankets, and a note (f. 71) gives particulars relating to the production of White Army cloth and Mixture cloth for pantaloons.

Though the firm achieved a considerable reputation as manufacturers of billiard cloths, which formerly had been made almost exclusively in the West of England, there is only one reference (f. 24) to them in the Note-book, and this merely gives the dimensions of gears and slays for three makes, other vital particulars being absent. These cloths are set very wide in the loom, and the record shows that even the widest gears and slays in ordinary use were not wide enough, and had, therefore, to be 'piecened' in order to accommodate the required number of porties, and obtain the necessary width. This, of course, was a makeshift arrangement, which seems to suggest that the record refers to the beginning of billiard cloth making at Bean Ing.

Though in many cases the details are incomplete, the book contains manufacturing particulars of nineteen distinct varieties of cloths, comprising no less than 209 makes of varying widths and weights; truly a wonderful list when it is remembered that Leeds was a 'plain cloth' centre only.

As for spinning, each manufacturer had his own wage scale, so for weaving; but there were also three distinct systems of payment in use. B. Horsfall paid 'per string' for weaving common broad cloths (f. 20), and also for mediums, ladies' cloths, coatings and pelisses. Mallelieu and Royston paid 'per wove' for cassimeres (f. 44), and Read paid in the same way for all his cloths (f. 19). Royston, however, paid 'per yard' for weaving toilinets (f. 48). The methods of computing weavers' wages were all based upon the size and spacing of the thread units—the wider the cloth and the closer the threads and picks were placed together, the greater the rate of payment.

A comparison of the scales of payment in the three systems shows that toilinets cost the most to weave. This was due to the soft slubbing used for weft instead of spun yarn, which made the process more difficult and lengthy than for other cloths.

Winding the weft from the spinning cop on to shuttle bobbin was done by children, of whom fifty are noted in the census. The usual rates of payment were for winding sufficient weft to weave one piece of cloth (ff. 20, 24), but Mallelieu paid "Id per wove for winding Cassimeres and I shilling for putting up." 'Putting up' or looming meant fixing the warp in the loom ready for weaving. Mr. Read paid I/4 for looming the warps of several varieties of cloths. Seven warpers and ten warp and listing winders were responsible for making warps for the looms of the factory, but the rates of payment for this work are not recorded.

After weaving, all pieces were perched in the burling chambers in order to check them and to detect the presence of any faults; then 'knotters' proceeded to make the surface of the cloth as level as possible by removing the spinners' and weavers' knots, which, if left in, would cause defective places when the fabrics were milled. The knotters also sewed identity letters and numbers on the pieces. The firm employed two 'pearkers' and ten knotters and letterers. A good deal of the wool used must have been of a very burry character, for there were sixty-two raw-thread burlers who took charge of the knotted pieces and extracted most of the burrs by means of large forceps called burling-irons. Fine quality goods were burled again after dressing in order to remove any burrs that were not visible or easily removable during the first treatment, and had been brought to the surface of the fabric during the raising process. This work required more highly skilled labour, because the burler had to operate on the surface of a cloth that

was practically finished—hence the distinction in the census of workers between the nineteen dressed-cloth burlers and the raw-thread burlers.

There were two cloth and yarn scourers and stovers, stoving being necessary for the production of pure white cloth.

The cloth mill found employment for eight millers and stockers, but there must have been more than that number of milling stocks, because each machine did not require the undivided attention of one man. There were two kinds of stocks (f. 67), of which the 'falling' stocks were used for general work and heavy milling, and the 'driving' stocks for lighter work and washing-off, i.e., freeing the cloth from the soap used for lubrication during the milling process. Details of the working capacity of faller stocks are given in "Wheeler's Calculation for Milling Stocks" (on f. 78). smallest stocks could mill 28 yards of broad cloth, while the larger machines had a capacity up to 47 yards. The record reveals that the firm had purchased two large stocks from this West of England maker, as well as a smaller one calculated to mill 36 yards. at the foot of Wheeler's calculation states that the Yorkshire machines were run at a much slower speed than those made in the West Country, and this fact no doubt led to the firm, in their search for greater efficiency and output, going so far afield for their milling machinery. The note is in Dixon's handwriting, and affords yet another instance of his intimate knowledge of the technicalities of the industry in which he was engaged.

Although milling was still practised at Bean Ing by the old and unpleasant method, of which a full description is set forth in the note-book (too unsavoury, however, for reproduction), and though this old method persisted in the local industry until long after 1850, the firm, very progressively, had adopted soap as the milling agent for the great bulk of their cloths. A note (on f. 55) gives the dimensions of the mill soap-tub with particulars for making soap solutions; also the quantities of soap required for milling various kinds of cloth. A further record (f. 56) states the total quantity of soap used for milling in the year 1810, amounting to no less than 12,796 lbs. As oil (soft) soap was used for milling fine quality cloths and tallow (hard) soap for the lower quality goods, the separate figures given for these indicate that the manufacture of high-class goods accounted for one-quarter of the total output of the factory. It was evidently intended to record the total number of yards of cloth milled during this year, and though

the intention was not carried out, the four cloths noted for this purpose—broads, plains, cassimeres and pelisses—reveal the different kinds of work on which the firm was chiefly engaged at the time, probably set down in their relative degree of importance with regard to output. From the various particulars given on these two folios, we can, however, with some degree of confidence, hazard a guess that the total output was not less than 73,000 yards.

A glance again at the list of manufacturing processes set forth at the beginning of the note-book shows how important the cloth dressing—or finishing, to use the modern term—operations were, for out of the 29 processes named more than one-third were for the purpose of building up, stage-by-stage, the style of finish peculiar to the fabric dealt with. This work was done in the cropping shops of the factory, which were staffed by 113 workers, of whom 02 were

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Raising, it may be explained, lifts up the fibres from the body of the cloth and arranges them, either trailed over the surface in one direction, or places them in a more or less vertical position. By previously 'wetting' the cloth thoroughly the fibres are rendered more pliable and ductile, so that when raised they take up and retain a sloping position in parallel formation on the face of the fabric, thus producing the 'dress-face' or trailed-pile finish, of which the superfine broad cloth is an example. For the production of a vertical or fluffy pile, as in a blanket or swansdown, raising is usually practised on a dry cloth, the fibres being lifted but not otherwise controlled in position.

Cropping (or cutting) simply cuts the irregular ends of the projecting fibres in order to produce a perfectly level surface, the extent to which it is carried depending upon the length of pile required by the style. Other particulars (ff. 53 and 54) show how the finishing routine varied for different kinds and qualities of cloths, especially with regard to the amount of raising and cropping they received.

Teazles for raising were purchased by the 'pack,' which contained 13,500 separate teazles, but the complete 'teazle measure' is recorded (on f. 31), and also on a later folio. Teazles were grown in the Selby district, but the larger (and better) supplies came from the West of England. The fuller's teazle (*Dipsacus fullonum*) has a very old and extensive association with woollen textiles, and is still indispensable in the finishing of dress-face cloths.

Tentering was for the purpose of straightening the cloth and standardising it in width. It was done whilst the fabric was in a wet state, and thus easier to stretch over the tenter pins. The cloth was then allowed to dry on the tenter frames which were usually fixed out-of-doors. A note (f. 80), however, records the completion and first use of the "New Dryhouse" in December, 1814. The brushing operation mentioned in the various finishing routines was simply for the purpose of straightening up the surface of the cloth after any disturbance to the fibres caused by cropping or drying.

The frieze was another type of cloth made at Bean Ing, and there is a lengthy description covering five folios (ff. 37 to 41) dealing with the preparation and use of the "frizing board" necessary for the production of the small beads or neps which formed its characteristic feature. The description again brings the instructor before us, for what is evidently a lesson dictated to the learner ends with the remark: "The other things are best learnt by observing the mill."

Two recipes for glossing compositions are given (ff. 35 and 56), the first being dated Oct. 17th, 1817. These, once more, afford evidence of the all-round technical knowledge possessed by the owner of the book, and record another instance of his continual search for improved methods.

Wage rates for the various branches of cloth finishing occupy seven folios (ff. 25-31), and comprise two different systems of payment. Dressing included both raising and cropping, and was paid for, either 'per piece,' or 'per yard.' The actual rate, however, in both systems was determined broadly by the quality value of the cloth—the finer the quality, the more dressing the cloth received, for which, of course, a higher rate was paid than for one of lower quality not requiring (or meriting) the same amount of labour to be put into it.

The dressing of broad cloths, cassimeres, pelisses and satinets was paid for 'per piece.' There was a difference, however, in the rates paid for broad cloths made at Bean Ing and 'market cloths,' *i.e.*, those purchased in the 'balk' or unfinished state from other makers.

Coatings, swansdowns, toilinets, cords, moleskins and velveteens were all dressed 'per yard.' Though some of the first three named cloths were made by the firm, many more, along with the cords, moleskins and velveteens were market cloths purchased chiefly in Huddersfield or Lancashire. These, coming from many different makers, would not be standardized like the Bean Ing fabrics, and would vary considerably in length—hence the adoption of the I-yard unit system of payment.

Brushing was performed, either by hand whilst the cloth was on the tentering frame, or on the power-driven brushing mill. Payment—in the nature of an 'allowance'—was made 'per piece,' with a sliding scale according to length, or was included in the rates for tentering. Presumably some kinds of fabrics did not require much brushing, so for these there was 'nothing allowed.'

Tentering was paid for 'per piece,' the rates varying according to the width (and sometimes the length) of the piece. The baizes, serges and waterproof cloths mentioned in this list would all be purchased, in a partially finished state only, from other makers.

Pressing was paid for 'per piece,' the rates varying according

to yardage, and also according to the kind of cloth.

Shags and coatings were 'glossed' (see Glossers' compositions, ff. 35 and 56), payment being made on a piece basis. The rates appear twice, the second entry being dated 1825. Incidentally, this was the last date to be jotted down in the note-book.

The process of 'saving' (f. 25) included in the wage rates is quite strange to modern practice. By sewing a thick linen binding round the lists of the cloth they were kept intact or 'saved' during the subsequent process of dyeing. The headings or ends of the piece were also treated in a similar manner, the object being to prove to the purchaser of the cloth that the fabric was made of pure wool only. At a later date, however, the latter 'proof' was rendered of very uncertain value by reason of certain unscrupulous manufacturers weaving in white bands at the ends of coloured pieces of inferior quality in imitation of the 'saved' headings of the better quality goods. The list of workpeople shows that the firm employed fourteen savers and seven loosers, the work of the latter, of course, being to strip the protective bands from the pieces after they were dyed.

Rather curiously, there are no records of wage rates paid for dyeing, so from this omission it may be inferred that though the owner of the Note-book had oversight of all the manufacturing processes and also the cloth finishing, the dyehouse and its working did not come under his control, though, as the mill-manager, he had to provide steam for heating the dye vats. That he paid considerable attention to the above requirement is evinced by the record, already referred to, of his experiment in steam raising (f. 33)—which the learner copied so neatly; and by the details of the temperatures obtained in the various dye vessels noted on a later (f. 57) folio. The learner, also, received special instruction from him regarding the properties of steam, for there is a copy (not transcribed here) of an experiment taken from Wm. Henry's book on *The Elements of Experimental Chemistry*, with a further exercise relating to it, evidently set by Dixon himself.

The one record (f. 7) of the first steam engine installed in the factory is interesting insomuch as it apportions the horse-power necessary for driving the machinery in the various sections of the mill. A comparison of the power required for the two scribbling chambers seems to indicate that, at this period, blanket manufacture formed the greater part of the firm's activities; for the lower room (devoted to blanket work) consumed  $14\frac{1}{2}$  h.p., against the  $8\frac{1}{2}$  h.p. required by the upper one, in which, presumably, the wool was carded for all their other cloths.

The estimate of the mill profit for the year 1815 (f. 61) gives us a glimpse of the financial side of the undertaking. This was evidently an annual task of Dixon's, for in it he refers to items occurring in the previous three years. It reveals a curious system of working. The scribbling and carding machines and the slubbing billies belonged to the firm, and the net annual profit from them was estimated at £5,200. Profits from spinning and weaving are not brought in, because, as we have seen, the 'manufacturers' had their own wage scales both for spinning and weaving. The spinning jennies, therefore, probably belonged to them, as did most of the looms.

Over half the total profits, however, came from the three manufacturers, Read, Horsfall and Royston, who paid 'percentages' to the firm, not only on the value of the wool they used, but also on the cloth they produced. The total amount from these sources was estimated to bring in £6,500. The other sources of profit were from the milling and dyeing departments. The latter was estimated to produce £2,000; the profit from the former is not entered. The grand total from all sources, except milling, was estimated at £13,700.

We learn incidentally from this estimate the rates of the weekly

wages paid to the various classes of operatives engaged in the two scribbling chambers. The two overlookers received five shillings for each scribbling and carding engine under their charge, so one would earn two pounds and the other thirty-five shillings per week. The card fillers (boys) were paid five-and-sixpence, and the pieceners (children, probably girls) received three-and-six. Slubbers earned about thirty-two shillings per week.

Minor items recorded include a recipe for removing loom stains, a method of rendering cloth 'moth-proof,' chemical tests for the acids used in dyeing, and the "Receipt for the Whitworth Bottle used at the Mill for Slight Accidents" (f. 71). In fact, nothing seems to have been forgotten or overlooked in the organization and daily work of the "Wonder Factory of Bean Ing"—a factory which owed its origin and progressive growth to the master mind of Benjamin Gott.

#### SELECTIONS FROM THE MILL NOTE-BOOK.

"Prices and Processes."

The contents of the note-book have been re-arranged to follow the order of the processes, the folio number being placed at the commencement of each passage. Headlines or titles not in the note-book are printed in italic type, as are other explanatory remarks. Additions to the text, to supply accidental omissions, are enclosed in square brackets. Corrections or alterations in the MS. are shown by an asterisk (\*), and the deleted word or number is added in round brackets whenever it is legible. The tables setting out prices have been much condensed.

## The Processes of Manufacture.

(f. 2.) Fleece wool has to go [through] the following 29 Processes before it is made into cloth ready for the Draper:—(I) The Sorting, (2) the Moating, (3) the Scouring, (4) the Dying, (5) the Drying, (6) Willowing & Oiling, (7) Scribbling, (8) Carding, (9) Slubbing, (10) Spinning, (11) Warping, (12) Weaving, (13) Knotting, (14) Scouring, (15) Drying 2nd, (16) Burling, (17) Milling, (18) Drying 3rd, (19) Witting & Raising, (20) Cropping, (21) Moising\* (Raising), (22) Drying 4<sup>th</sup>, (23) Shearing, (24) Brushing, (25) Burling, (26) Drawing, (27) Brushing, (28) Lettering & (29) Pressing.

## Spanish Wool.

(f. 2.) The mark of the wool grown upon the Duke of Alva's Estate sold at 9/6 per lb—1812—Very fine and good. Sold under the name of Alva Wool.

The mark of the wool grown upon the Infantado's Estate—very fine wool very good. Infantado the name of the Eldest Son of the King of Spain—Sold under the name of the Infantado.

In 1813 the Quantity of Wool imported was 3,700,000 lbs. Do amounted to upwards of 7,000,000 lbs. to no less than 15,700,000 lbs. In 1813 the Price abroad was 3/- pr lb in London 6/1814 ,, 3/6 ,, 5/6 1815 4/6

Sorting Spanish Wool.

(f. 3.) In Spanish Wool after the Sheep are shorn the fleeces are sorted in four different degrees of quality which are marked and known by the names of R, F, T & K.

R is the finest or first sort—F the next and so on. (Some years ago it was very easy to buy the wools by these marks, but now it is customary to buy entirely by the Eye, there being no dependance to be laid upon the marks.) There is also another sort of wool marked A, which is lambs wool.

The wool is always well washed in water when sorted over from Spain. With packing it is so felted together that before it can be manufactured it must be batted or beaten with sticks to open it which at the same time drives out dust and dirt, it is then taken to a board and all the coarse Bits of wool which are called picks, Tar, or other dirt such as chafings from the bags in which they are brought over, &c are taken out. This process is called moating and should be carefully attended to, after this is done it is thrown into a Bin and is ready to be weighed out for manufacturing. this [is] done by women.

Sometimes the sorts are so very uneven that it is better to look them over and divide in the.... The finest come to B.I. 10/-.

[Many alterations on this page; the sentence in brackets was struck out. ]

## English Wool.

(f. 3.) The wools grown in the different counties of England are so very different in their natures and properties that I must

treat a little on the qualities of the wool grown in them.

The wool used at B. Ing is chiefly from Shropshire, Staffordshire, Herefordshire, Glostershire, Monmouthshire & some other west county. Wool from the five first counties are all called soft wools and mill extremely well, though the Shropshire [is] the best, the finest wool is generally supposed to grow in Herefordshire but this is a mistaken Idea, there undoubted is the greatest weight of fine wool from the fleeces, the finest is grown in Shropshire tho' the quantity of prime is not so large.

(f. 4.) These wools are bought in the fleeces and are divided into II different degrees of fineness—which are called sorts, and are distinguished by the Names of Royal Prime, which is the finest, Prime the second, Choice the third, Super Head, Downrights, Seconds, Abb, Livery & Britch—these wools are mostly white, but in some fleeces there are a few grey hairs which are always taken out, which consist of both very fine the middle sort and very low, these are all thrown together and put into the second

sort of Greys and is called Super Grey. In these Counties where

the sheep graze the soil is clayey.

The Wool from Norfolk and Suffolk are both bought under the Name of Norfolk wool and always contain grey hairs, it is grown on a flinty soil which of course contains Chalk, owing to the combination of the carbonate of lime with the animal oil and wool it feels harsher than Soft Wools, it also contains a quantity of Sand for which reason it is always bought cheaper than the Shropshire—this is divided into 10 sorts or degrees of fineness which are the same as the soft wools omitting the Royal Prime which sort is not made, there are also three qualities of Greys which are called Prime Grey, Super Grey and Low Grey the Prime Grey is made equal in quality to the Choice and is sold at the same price. the Super G to.....

#### Wool Yields.

(f. 59.) If wool loses ½ its Weight it doubles the Price ",  $\frac{1}{3}$  —it adds  $\frac{1}{2}$  to the Price ",  $\frac{1}{4}$  and so on— lbs. Price lbs. Price

For if 2 : a :: 1 : 2a because the smaller the

quantity the greater the Price.

March 1816.

Spanish Wool delivers in Dressed Cloth 1 less than its Weight that is-4 st. 4 lbs. or 68 lbs will deliver 51 lbs of dressed Cloth or 42 yds, 1 lb 4 oz nearly to the yd.

English Wool delivers in Dressed Cloth \( \frac{1}{3} \) less than its Weight i.e. 5 st

o lbs or 80 lbs will deliver 53 lbs of dressed Cloth or 42 yds, I lb 4½ oz to the

Clean Downrights, Seconds or Abs for military Goods delivers in dressed Cloth 130 less than its Weight—i.e. 4 st 4 lbs or 68 lbs of Wool will deliver 47½ lbs of dressed Cloth or 30 yds, I lb 9 oz to yd.

This Rule is particularily useful in making Army Whites for when the Number of Ounces to the yard is given (in the finished State) nothing more is necessary to find the weight of Wool that should be weighed out to make one yard than to multiply the ounces by 10 and divide by 7—then multiply this again by the Number of yards you wish the Piece to be—& it will give the Weight of Wool to be weighed out—And again—To know what length to mill a piece to—multiply the Weight of Wool by 7 & divide by 10 & again by the number of Ounces to the yard & it will give the length.

## The Machinery and its Working.

The Willows. (f. 67.) The Diameter of the Willow from Tooth End to tooth end is 28 inches, [it] makes 300 revolutions per minute.

## Scribbling and Carding Machines.

(f. 65.) Cloth Manufactory.

The Single Scribblers have each 17\* (16) Cylinders with cards on namely 5 Workers & 5 Strippers I Swift I Breast I Fancy I Doffing Cylinder & 3\* (2) Cylinders to draw the Wool into the

The Double Scribblers have 26\* (27) Cylinders i.e., 8 Workers 8 Strippers 2 Swifts I Breast 2 fancies 2 Doff. Cylinders 3 Cylrs to receive the Wool.

Five of the Scribblers are 4 feet in breadth, the two from the West of England only 3 feet wide.

9 stones 16 lbs to a Stone Spanish Wool will pass thro I Scribbler in 11 hours—coarse wool 15 Stones.

The breadth of the Carding Machines vary, two of them are only 24 inches broad four\* (two) 28 inches 1\*(two) 29 & 1\* (two) 30.

the Cardings from the 30 inch Carders are stretched I\* (2) inches by being rolled in the Machine; most of the Carders will deliver 47 Cardings per minutes the ones made like those at Armley Mills only deliver 45 per minutes.

(f. 67.) A single Scribbler has 16 Cylinders with Cards on them A Do Double 25

9 Stones of Spanish Wool will pass thro' a Scribbler 4 feet broad in 11 hours—about 16 Stones coarse Do.

The Carding Machines [are] 30 inches in breadth, and deliver 45 Cardings 31½ inches each long per minutes, 31050 Do delivered in III hours or one day

in 112 nours of one day.	Diam	Circumf.	Revolutions
(f. 7.)	Inch:	Inch	per Min.
The Swift on the 30 inch* (2 feet) Carders is	$32\frac{3}{4}$	10213	75
The Pulley on Swift to turn Breast	$10\frac{1}{2}$	33	75
the Breast Billy turned by Swift	9	$28\frac{2}{7}$	$87\frac{1}{2}$
Large Pulley on Swift to turn Strippers and			
the Fancy	22	697	75
Stripper Metal Wheels—all	$8\frac{1}{2}$	$26\frac{5}{7}$	$194\frac{2}{7}$
Fancy wheel	$4\frac{1}{2}$	$14\frac{1}{7}$	$366\frac{2}{8}$
Fancy itself	$9\frac{1}{8}$	2819	inches
·			run over

Card Clothing—Specification.

(f. 68.) The Cards on the Breast of the r	new Do	uble (	Carding Machine
have	115 T	eeth in	5 inches
The Workers on the Breast	115 te	eth in	5 inches
The Strippers $D^0$	IIO		5 inches
The Cards of the first Swift	125		do
Workers on do	125		do
Strippers do	110		do
Doffers between the Swifts	130		do —
Cards on the second Swift	135		do —
Workers do	140		do —
Strippers do	110		do —
Last Doffer	140		do
tho' the cards only four inches broa	ıd		

Fancy (f. 69.) Coppy of Invoice Sep<sup>r</sup> 1811—Abraham Fairburn

115

5½ inches

Hightown [near Heckmondwike].		
30 feet filliting Cards 1½ Inch broad for feeding [@]		16d
22 Rows/Cards 30 by 5 inches Broad, in 115 (?) wire .		
for Breast & Workers [@]	IO8	
42 feet filliting Card 1½ inches broad for 2 Strippers over Breast Roller		20 <sup>d</sup>
48 Rows Cards 30 by 5, 125, first Swift & 3		
Workers & Middle Doffer	II8	6d
36 feet filliting Card 1½ inches for 2 Strippers 120 wire		23 <sup>d</sup>
6 rows Staple Cards 30 by $5\frac{1}{2}$ Inches 115 for first fancy Roller	II8	
26 rows Cards 30 by 5, 135, for last Swift & Angle Strippers	128	6d
12 Rows of Cards 30 by 5, 140 for 3 Workers	13 <sup>8</sup>	
6 Rows Staple Cards 30 by $5\frac{1}{2}$ for latter Fancy 125—	I28	
36 feet of filliting Cards 1½ Inches broad 135 wire for latter Strippers		24 <sup>d</sup>
9 Sheets Cards for doffers 30 by 4 broad 140-5	II8	

Expence of Cards about 87£ The above Cards just covered a Carder similar to those at Armley Mills. Rules for Working the Scribbling Machines.

(f. g.) Never have the Scribblers too much loaded or the consequence will be that your wool will be very short and the cloth broken bottomed.

Self common colours are put once thro' a double Scribbler and once thro' a Single and thro' a Single Carder and double Carder. The Warp of Mixtures are put 2 thro' a double and thro' a Single Carder, the Weft 2 thro' double I Single Scribbler & thro' a Single Carder.

Whites are always put twice thro' a Double Scribbler & once Double Carder. Some Spanish Wool for Pelisses went thro' a double Carder and was found [to] spin further and make better Yarn than the same wool thro' S. Carder.

Mallelieu has his Self [colours] only put once thro' at Double Scribbler and thro' a Single Carder.

Coarse Wool White 2 Double Scribbler I Single carder I Single

Carder, Fine Pelisses the very same.

If mixtures are tender I Double Scribbler I Single Scribbler only for Warps, & Wefts 2 Thro Double Scribbler & I Single Carder. Mixture always plucked.

The more slow workers &c on the front of your Engine the less the Wool is injured. When your wool is put on the carder take particular Care that wool on the Sheet [is] very even.

[Many deletions and additions in this folio.]

Rules for Carding on the 30 Inch Carders. for 16 Skeins or Price 91d let 8 Cardings weigh 4 drachms

$12\frac{1}{2}$	7 Do	5	do
$9\frac{1}{2}$	5 let 8	6	do
8	4 Do	7 -	do
	[and intermediate values.]	• ,	

N.B. Take one Carding more from the 2 feet Carders to make the cardings

answer to the above Statement. Turn over to folio 8.

(f. 8.) In order to regulate your weight according to the Price; observe how many times your Doffer goes round each weight of Wool, then multiply the Revolutions by the number of Drams you would have your 8 Cardings

Example: let us suppose that the 8 Cardings were wanted to weigh 5 drams or what you want to sloob to 12½ Skeins per Watern, and that the Doffer goes 16 times round to each weigh of wool; what Number of Drams

must you put into the Scales

16 the Revolutions 5 Number of Drams

80 Drams or 5 oz the weight put into the Scales.

Or suppose the weight for 16 Skeins was  $3\frac{1}{2}$  oz, what must be weighed for  $12\frac{1}{2}$ ?  $12 : 3\frac{1}{2} :: 16$ 

(f. 6.) On the Doffer of the Carders the cards are 4 inches wide and they

doff 9 Cardings each revolution.

The difference of the velocity between the Swift and the doffer is 13 to 9 for those that deliver 9 Cardings, as  $12\frac{1}{2}$  to 8 for those that deliver 8 Cardings.

The Slubbing Engines.

(f. 66.) The draught of the Billies from Spindle point to Spindle point is just 5 ft. 10 ins. = 70 inches, & there are 50 Spindles therefore  $70 \times 50 = 3500$  is the number of inches of Slubbing made each draw

Inches Draw out Yards

out of the Machine, & again by saying 3500: 1: 14440: 148½ the number of draws out taken to slubb a Watern and as 15 Waterns

are done per day 2227½ Draws out are made per day.

(f. 65 bis.) Common Broad Cloth Wefts are sloobed to 9½ Skeins to a Watern and 8 Cardings should weigh 6 drams therefore [after a calculation] 15 Waterns per day price paid for slubbing 5 pence per watern 6s. 3d. per day.

(f. 67.) When Slubbing common Broad Wefts to  $9\frac{1}{2}$  sks to

Watern 90 lbs of Wool are carded per day.

A Slubber earns at 5<sup>d</sup> a watern 6s. 3d. per day. When Slubbing superfine Broad Warps to 12½ sks to watern 75 lbs of wool are carded per day.

The draught of the Billies 5 ft. 10 in. 2227 draughts made by a Billy per day

 $148\frac{1}{2}$  Do Do to slubb a watern

by calculation 83 Inches of Carding required to make 5 f. 10 in. of Slubbing are taken in by each Spindle at each draught of the

Billy.

(f. 5.) Slubbing. To know the Profit on Slubbing deduct the Slubbers Price & the Wages of the Overlooker Children &c. 2 shilling in the Pound or  $\frac{1}{10}$  of what they earn is taken off to cover the wages &c &c. When the Slubbers are paid 3d. &  $3\frac{1}{2}d$ .—four times as much and 6d. over is put on for Profit in the Manufacturing Book\* (Great Book).

4d &  $4\frac{1}{2}$ d.....is four times as much and 8d over

all above 6d & 6½d are four times as much and only 1 shilling over. When the Slubbers spool to 4 skeins, 4 times 1520 yds in the Watern, or in 6 pounds, 16 oz. to the lb—they are paid 2d per skein—

Table	d	Table	d				
4 Skeins to Watern	2	14 Skeins to Watern	8				
6	3	15	9				
8	4	17	IO				
$9\frac{1}{2}$	5	19	II				
$10\frac{1}{2}$	6	22	I/2				
121/2	7	30	1/6				
[and intermediate prices.]							

(f. 11.) Spinning and Warping.

In pinning after you have set in, (put the clock right, draw the slide sharply over the threads lock up quick untwine the sloobing and draw carefully out, when you put up, let the slide move quickly over the threads or else the sloobing will twist, these things are best learnt by watching the men.)† the clock is for telling what thickness you are spinning also how many Skeins you have done, the clock is divided into skeins, if you are spinning with 80 spindles when you have done 10 skeins take off 4 coppins which of course ought to measure\* (weigh)  $\frac{1}{2}$  a skein, take this to the quadrant, and it will tell you what length you are spinning to. - but to make sure, always

<sup>1 &#</sup>x27;Great Book' has been crossed out and 'Manufacturing Book' substituted in its place in the much better handwriting of Dixon

reel at first. (f. 12.) (if you spin with 40 spindles when you have done 5 Skeins take off 4 coppins, when 60 Spindles and you have done 10 Skeins and for any number whatever)†; always make the coppins reel half a skein, for the Quadrant is divided so as [to] weigh one ½ Sk. the Number on the Quadrant opposite the Pointers is the number of Skeins you are spinning in a Watern

6 lbs.						
†[The writing within the brackets has been crossed out.]						
(f. 18.) Prices paid for Spinning Warps.						
All warps not drawn to 30 Skeins to a Watern are paid at I pen	ny pe	er Sk	ein			
36 to 39 1½ per Skein						
46 ,, 49 2						
$56 \cdots 3 \cdots $						
Prices paid Spinning Weft by B. Horsfall.						
12 Skeins in Watern 6d to 18 increase ½ per Watern						
18 skeins in watern 9						
19 ` 10 20 II						
to 26 increase ½d per Watern B. Royston 1819						
26 14 1/2						
$1/4\frac{1}{2}$						
$30 \dots 17 \dots 1/6 \dots 3^d$						
36 24 2/ 4 42 36 3/ 6						
(f. 17.) Prices paid for Spinning Weft—Mr. READ.						
18 Skeins to a Watern is 9 <sup>d</sup> per watern of 1½ lb						
$22-25$ $13\frac{1}{2}$ Do $2\frac{1}{4}$ ,,						
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						
32 18 3 36 2 shillings 4						
42 6						
50 8						
B. R[oyston.]						
1019						
24 13 Prices $2\frac{1}{4}$ 26 15 $1/2$ $2\frac{1}{2}$						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						
$32 \dots 2/- \dots 1/8 \dots 4$						
$36 \ldots 2/6 \ldots 2/- \ldots 5$						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						
1,0		XX7	.C.L			
(f. 30.) Prices Batley Royston pays for Spinning Swansd	own	vve	eit.			
16 Skeins to the Watern 1½ per lb.						
per 32 skeins 04 pe	r					
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-					
			1			
	£	S	a			
80.) 5 Looms bought of Nathan Carlton Armley stand						
on the side nearest Spring Gardens cost £9 each						
113 qrs wide	45	O	0			
Looms bought of Bentley of Birstall stand on the						
side nearest Leeds £8 11½ qrs wide	32	0	0			
Looms bought of Thos Taylor Armley stand within						
the two Arches £7 78 each weave 13 qrs.	14	14	0			

(f.

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#### Bobbins.

Best Bobbins bought of Hall Meadow Lane 4/- a Gross

Slays.

(f. 71.) The following was Benj. Horsfall's Assortment of Slays when the stock was last taken which may serve as a guide to know the different kind of Slays made use of in manufacture of low cloth. Decr 1811 [A Selection.]

				L						
-	22	Slays	84	Porties by	19 in	99	inches	or	II	qrs
:	25		80			90				
	12		76			99				
	14		72	-		72				
	17		70	_		99				
	19	{	62			99				
	II		50			99				
	34		42			94				
2	25		40			94				
	3		26	-		81				

Calculations for Warping.

(f. 12.) Before you finish your warp, enquire how much sloobing there is for weft and how much is to go into a wove—

Suppose there were  $7\frac{1}{2}$  watern for weft and 30 oz for a wove

what [is] the number of woves?

Rule. Reduce the waterns to ounces and divide by the number in a wove the quotient will be the number of woves the weft will cover.

(f. 13.) When this is done calculate what number of Skeins will make 24 woves.

Rule. Multiply the number of woves reduced to yards by the number of Porties and divide by 38—

Example. Suppose the Number of Porties was [70]—

Sizing.

(f. 49.) The best way to size a Warp of any kind is to do it at night, and lay it in a cool Place and upon a flaged floor till morning; then take it out to dry—

(f. 65 bis.) 40 lbs of Rabbit Pelts are boiled in about 40 Gallons

water boil 4½ hours and strained thro a Sieve makes Size.

Wool Blend for Army Blankets.

(f. 58.) Blanket Manufactury at Burley Mill April 1811. Camp Weft a Blend No. 29. [Price per Pack] Pk St Lbs £ 1415, 501 Smith's Head each Ι 0 II 4 5 8298 J. E. Pease Livery I 10 5 IO 4 Whitlark's fine abb 10 0 0 Do 12 / 504 Ι 3 Curlings Lusty Small 8 30100 1 ΙI 0 0 Raines' Lamb 8 1643 I 12 0 7 8 Nottidge's Kent 7532 Ι 7 ΙI 15 Do Kindly 8 7 Ι 7 ΙI O Do 8 do 7 34 I II 0 O 3862 Do 8 Lamb I 7 IO 15 Curlings Kindly 8 6003 Ι 7 ΙI 8 Nottidge Kind Head 753I Ι 7 TT 15 8 Do 1107 Lamb Ι 7 IO 15 12, 20, 24 Do Kindly each 8 Ι IO 0 O 8 3050 Curling and Co Lusty Small 7 II 0 Ι 0 Porter and Co Lamb 8 7183 I 7 O 12 TO 8309 Whitlarks Abb TT T2 0 0 T 4 1231 Do Do O Τ IO 12 0 5 814, 218 T Smith's Head each 0 5 Ι 4 II Pease Livery 0 5 TO 4 TO Folio Sheet (f. 60)No. No. [Pk st lbs] [Price] [Cost] Smith's Head 58 1415 501 S 56 8141 II  $\frac{3}{4}$ 5 0 5 19 218 Carriage 2 II 58 J. E. Pease Livery 8 8298 10 IO IO  $9^{\frac{1}{2}}$ 27 7 114 Whitlarks fine Abb 58 514 504 8309 II 12 0 65 15  $4\frac{1}{2}$ 5 1231 Curlings lusty small 58 30100 II 3 33 3050 ∫ Raines' Lamb 8 58 I 12 IO 18 15 1643 Nottidge Kent 58 7532 3 O 0 ΙI 15 35 5 7531 Do Kindly 58 7 34 8 82 ΙI IO 12 7 24 20 Do Lamb 2862 10 15 58 3 32 5 1107 8 16 Curlings Kindly 58 6003 Ι II IO 8 Porter & Co Lamb 18 58 7183 I 12 IO 15 7

The above 34 Packs produced 1413 Waterns of Weft when mixed with 6231

lbs Oil.

#### Particulars for making Blankets. [A Selection.]

(f. 62.) All common Blanket Slays are the same fineness that is 41 Porties by 15 in thirteen quarters

20 Pairs of Common Blankets 7 qrs 2 in wide and 8 qrs 3 or 4 inches long called 8 qrs Foreign Orders to weigh 5 lbs per pair-

28 Porties by 15, 28 Strings (3 yards 6 inches) Warp should weigh 6 waterns 4 lbs to 7 watern Weft & Warp 21 Wt.

20 Pairs of Do 8 grs 2 inches called 9 grs Fr. Orders 9. 3 long,

6½ lbs per Pair.

34 P. 31 S. Wp. 8. 4 to 9. Weft & Wp 28 Waterns

18 Pairs of little Nines to measure full 81 grs wide, 2 yards and ½ long; 7½ lbs per Pair. 36 P. 28½ St. Wp 8. 4 to 9 Weft and Wp 28½ Wtns.

16 Pairs of common Blankets 9 quarters wide 10 qrs long; 8 lbs per Pair

37 P Whitney 38 P 26½ St. Wp 8½ to 9 Wp & Wft 28 or ½ (f. 63.) 10 Pairs Do 13 qrs broad 14 long 18 lbs per Pair 54 P, 21 Strings 2 yards, Warp 12, Weft and Wp 38

(f. 64.) 8 Pairs of Blankets 15 broad and 16 long 26 lbs a Pair 21 St, Warp 12½, Weft and Warp 43 Waterns

14 Pairs of Navy Blankets 9 qrs long & 7. 3 broad 8 lbs a Pair

Wove in a 34½ Porties by 13 in 11 qrs 3 in Slay

31 Porties by 13; 21 St 1 yds; Warp 8½ Waterns, Weft & Wp 24

18 Pairs of Camps 6 Pairs to weigh 51 lbs

32 P by 13, 28 St. 1 yard. Warp 10 to 10½; Weft and Warp 32½ Wove in 33 by 13 Porties in 11 qrs Slay—

5 qrs Coverlets 15 Scores of Threads Warped; stand in the

Loom 4 qrs 2 inches 7 qrs long 13 lbs a Covt.

6 qrs Coverlets 19 Scores and 5 threads 8 qrs long each 10 qrs Coverlets 33 Scores 15 Threads 9. 2 broad 2½ yds long

All the Coverlet Slays 3 Scores 15 threads in a quarter of a

Particulars for making various Cloths.

Pelisses (f. 69.) Geers & Slays that the Pelisses were wove in Decr. 1811—these are Plain Pelisses.

2 - 72 Porties by 19 in 8 ars wove 69 Port. or 3 Porties under breadth.

		 J	- )		9-~	 0 7 2 0 2 0 1	0-	J	2 02 0-0
I	- 75		19	8	qrs	71	or	2	do
	78		19	9	qrs	$66\frac{1}{2}$			do
	84		19	10		63			do
	80	:	19	IO		60			do
	78		19	II		53			do

Mr. Read's were all 80 by 20—8 qrs—80 Porties.

(f. 70.) Mixtures, Corbeaus, & Browns will not spin so far from the same quality of wool as Drabs Bottles and Blues; Whites will spin nearly a skein further for making Stout Cloth that is 5 St [strings] to 40 vds.

Seconds Wool should not be spun further than the Warp 17½

Skeins the Weft 15½.

Mixtures corbeaus & Brown will spin to the above length—

	Dow	nrights	Warp 20		21 Warı	
	01		Weft 18		19 Weft	
	Cho	ice 23		Prime	e 24 Warr	
0	m		Weft		22 Weft	
	Porties	19 - 11				
80		19 11				about 14 sh & above
78		19 11	Č	& Ladies C	loths &c	Per yard
76		19 11				
74		19 :11	7		vove in it	Prime & R Prime 14/-
72		19 11	7	o do		Prime & R Prime
					with the	per Cent of B I on <sup>1</sup>
70		19 11	: 6	57 or 68 –	Choice	12 sh per yard
68		19 11	. 6	5	Super	11/-
67		19 11	$\epsilon$	$63\frac{1}{2}$ or $64$	Super	10/6
66		19 11	used ge	nerally whe	n warp ru	ns short
64		19 11	: 6	or 2	Head	9/6
62		19 11		;8	Head	9/-
60				55 or 6	Downs	8/-
58		19 11		54	Downs	8/_
56		19 11	•		Seconds	
		Seconds			,	• •
			2/- (		6 Price	es of the wool when the
			2/6 F			ove Page was made out.
				R. Prime 4/8		
		- Lor	31 -			

Toilinets (f. 48.) All the Toilinet Warps are laid 31 inches broad and cotton warps for Toilinets are all—28 Porties by 19 and 90 yards long but by weaving they stretch to 100.

The prices for Cotton Warps are paid at 13½d a Portie. Toilinets will take about ½ a pound of weft to a yard—

Wool at 3/6 and 3/11 a Pound will be about 5/6 a yard

 2/9
 4/6

 2/4
 4/2

 2/2
 3/10

 1/10
 3/3

Prices B. Royston pays for weaving Toilinets

Spanish or fine English Wool slubbed to 14 or 16 paid 1/2 per Yard

Wool at 3/6 a Pound slubbed to 12 & 13 pd 1/1 2/9 II 1/- 2/4 IO -/1I 2/2 9 IO<sup>d</sup> 1/1O 8

(f. 24.) The manner that Batley Royston uses to weigh out Yarn for weaving Toilinets—

three or four Reels full are given to the weaver at a time-

a Reel full being 12)10080 yards

7) 840 Hanks
120) 120 Raps
1 Reelfull

960

I Shilling is paid for reeling 15 Reels full I Reel full is 6 Skeins 960 yds.

Cassimeres (f. 42). The Slays of all Cassimeres single Milled Cloth are 34 inches wide—all double milled Cloth are 42

<sup>&</sup>lt;sup>1</sup> For the Bean Ing mill percentage, here included in the price, see the Estimated Annual Profit below, p. 306, and the Introduction, p. 34.

Best Spanish Wool ought to be spun,

The Warp to 40; and Weft to 46 or 8 Single Milled Do 38; and Weft to 36 Double Milled and wove in a 54 Slay, warped 52 porties by 20

Low Spanish Wool—The Warp spun to 38 Weft full 42 S. Milled
Do
36 Weft full 34 D. M
Warped 50 porties by 20 wove in a 52 sley

Best English used the same

2nd Best English—Warp .... 34 Weft 38 Single Milled Do 30 Do 28 Double Do Warped 46 by 20 wove in a 48

3rd English—Warp .... 30 Weft 34 or 6 S. M
Do 28 Weft 28 D. M
Warped 44 by 20—Wove in 46

Double milled Cassimeres are very seldom made any lower. 4th English. Spin Warp 28—Weft 32

Warped 42 by 20 wove in a 44 Sley

This Statement is made out for Whites and Drabs, if the wool will spin further, spin it. Mixtures and dark colours spin as far as it will make good yarn and use the set nearest to the above Statement— For Stout Pieces tho' not double milled spin the wool not quite so far and weave it one Portie narrower than common Cloth.

(f. 45.) The Weight of Weft James Mallelieu and Batley Royston put into a Wove.

Single Milled. 50 to 54 porties will take II oz or 10½ oz White to a Wove

Do To Coloured Do [&c]

Plains (f. 46.) The Best Single Milled Plains are made of the best English wool and when wool is about 5/6 a Pound will cost or can be made for about 7/6 or 8/- a yard

4/4 a Pound 6/9 and 7/- a yard 2/8 a Pound 5/- and 5/6 Do 1/10 Do 3/3 and 3/8

Best Plains—spun from 22 to 24 Warp 24 Weft Warped 36 Porties 2nd Best—Spin Warp 19 to 20 Weft 21 to 22 Warped 34 by 20 3rd Best—Spin Warp 17 to 18 Weft 20 Warped 32 by 20 4th—Spin Warp 16 Weft 18 or 19 Warped 30 Porties

(f. 47.) All double Milled Plains are spun from 16 to 17 Warp;

Weft 16 to 18—and about 20 oz. Weft to a Wove.

Plains require 2 st. 8 lb of wool to make about 36 or 40 yds. Divide 15 lbs for Warp 23 lbs Weft.

Kerseys. Kerseys spun to 16 and 18 Warp 20's Weft 24 oz. Weft put into a Wove 1/8 per Wove paid for weaving them. 3 Stones of Wool will make about 36 yards Kersey

Take 18 lbs of Wool for Warp 29 lbs for Weft.

The Weft of Kerseymeres & Kerseys, Plains, Toilinets & Swansdowns are all spun the Warp Way.

(f. 45.) Batley Royston put 16 oz of Weft into a Wove of Plains whether fine or coarse.

Army Cloths (f. 71.)

2 Stone 5 lbs Wool 1/- lb \ will make 33 yards of White army

2 ,, 5 - Do 1/0\frac{1}{2} \ Cloth 54 in broad & weigh 1 lb 9 oz

the yard, the manufacture of the piece with listing, Oil &c costs £3 3s 4d or 23 Pence or  $23\frac{1}{4}$ d per yard, the cloth when made costs 4/2 per yard.

5 St 4 lbs of Wool the average Price per lb will make 41 yards

of army Mixture Cloth for Pantaloons.

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(f. 24.) Billiard Cloth Geers—
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Prices for Weaving and Winding.

(f. 20.) Prices B. Horsfall pays for Weaving Common Broad Cloth—

```
per String
                                                       Winding [per piece]
         30½ by 19
                                  6d
                                                           1/9
         34\frac{1}{2}
38\frac{1}{2} to 40
                                                           2/-
                                  7
                                                           2/2
                                  9
         44 to 46
                                  II
                                                           2/4
                                                                   Whites I/\frac{1}{2}
                                  I/I
                                                           2/6
         51
         54\frac{1}{2}
                                  I/3
                                                           2/8
                                                                              I/2
         84
[to]
                                                           4/-
                                                                              2/4
                                  2/4
```

(f. 19.) Prices Mr. Read pays for Weaving.

Double Drabs

Common Broads

Ladies

Mediums

Plain Pelisse

Twilled Do

Rateens 100 Porties 2/6, 110 2/9, 120 3/-

(f. 44.) The Prices James Mallelieu pays for Weaving Cassimeres
50 Porties and above 2/- per Wove
48 Do 1/10 Cassimeres are very seldom made
44 Do 1/6 much lower

The Prices Batley Royston pays for Weaving Cassimeres—

```
Porties 44
                          2/2
Porties 54 by 20
                                                                    1/7
                          2/-
        52
                                                       40
                                                                    I/4
                           2/-
                                                       36
        50
                                                                    I/2
        48
                          I/IO
                                                                     /II
                                                       32
```

(f. 50.) James Mallelieu pays 1d per wove for Winding Cassimeres—whether fine or coarse and 1 shilling for putting up.

(f. 24.) Prices for Winding & looming. Mr. Read.

Double Drabs
Common Broads
Ladies
Mediums
Plain Pelisses
Twilled Do

Winding looming
1/4

1/4

Milling.

(f. 67.) The feet of the falling Stock make 37 Strokes per minute
Do Driving Stocks 24 Do

(f. 78.) Wheeler's calculation for Making Milling Stocks, Sept. 1813.

The width of the Stock from side to side from 15 inches to

15 $\frac{1}{2}$  ins. in proportion to the depth.

Stocks are seldom if ever made less than 24 inches deep. A Stock of this description will mill 28 yards of Best Superfine Spanish Broad Cloth—if the depth be \( \frac{1}{4} \) of an inch deeper it will mill I yard more & for every quarter of an inch the same. The Two large Stocks are calculated to mill from 46 to 47 yards—the depth from the bottom of the Stock to the first Notch is eleven inches & the second is always 6 inches above the other—this lower Notch must be raised or lowered in proportion to the quantity to be milled, in the small stock which he has just put up calculated for milling 36 yds the lower Notch is 9½ inches from the bottom.

In the West of England the Stock feet take 47 & 47 Strokes per minute, at Bean Ing & thro' the whole of Yorkshire they make

about 37—B I sometimes only 36.

(f. 55.) Soap Tub in the Mill is 36 inches long-30 deep & 27 broad-

therefore in 105½ Gallons of water are dissolved 80 lbs of Oil Soap for milling Superfine Cloth. 80 lbs Tallow Soap are dissolved in the same quantity of water for low priced goods.

2 Ends common superfine broads require by Experiment to mill them 6 lbs of Soap. doubled milled 8 lbs—Single Milled Cassimeres about 80 yds long—3 lbs Double milled 4 lbs.

In stocking black Cloth 2 Pints of Gaul are used for three Pieces —it is never used for milled cloth excepting when the cloth has taken a long time to mill and the soap gone sour-it is then only used for finishing off and not as a Process of milling; cloth washed in it prevents it from being Moth eaten.

(f. 56.) The whole Quantity of Soap used for Milling Cloth in 3254 lbs Oil Soap 9542 lbs Tallow S[0a]p=12796 lbs—

Scouring House about 2400 Tallow—

Number of Yards of Broad Cloth [not entered] .....Plains ......Pelisse

#### Finishing Routine for Best Superfine Cloth.

(f. 51.) When best Superfine Cloth is taken from the Mill it is first dryed on the Tenters, when dry it is taken off & well wet out and taken immediately to the Raising Board and given five throughs with old Teasels, using the worst first, the sixth time use new ones (and if the Piece be very stout or a mixture it will require one thro' with Flatter Cards)—in this state it is thrown on a Horse to sipe (about 10 minutes) if thin cloth it ought to be dryed before it is taken to the Shear Board where it is cut once over without raising the wool, (this operation is called cropping) it is then well wet out again and raised four times thro' with old Teasels on the Raising Board, it is then struck twice thro' with flatter Cards at the Perch\* (Pearck) which stands in a Trough of Water, roll it up for Tenter and let it lay one day wet; then take it to the Tenter and strike it down with (f. 52) Cards and brush it, it is always stretched one yard to the score and if stamped 58 inch broad stretch it to 61, when dry take it to the shear Board and cut it three times over with the best finishing Shears and once on the back side.

A Piece should never lay in Press above 24 hours without being turned, when turned it should lay three day longer.

Finishing Routine for Various Kinds of Cloths.

(f. 53.) Middle Prised Cloths are often partly raised with Cards after two thro' with Cards, if stout cropped wet and in the shearing are cut twice.

low prised are dryed & tentered before cropped and then only have two cuts. The wool of all cloth in the raising is turned after every thro', when moised always the same way. Ladies cloth excepting when very stout are raised upon a whole wool, that is they are not raised after cropping and always dryed and tentered before cut—cut if best three, two only common price.

Pelisse Cloth dressed the same as ladies and always finished in

the white excepting when for Blue or Black.

Cassimeres double milled are dressed the same as fine cloth. Single milled always raised upon a whole wool—cut twice over, low priced only once.

(f. 54.) Swansdowns are mostly raised with cards and only cut

once.

Toilinets require a good deal of raising and require the best shears.

The lowest priced coating are raised wet mostly with cards only two thro', tentered, brushed and dryed then run thro' the brushing mill, when worth about 4/6 or 5 Shillings they are lightly raised dry with cards and cut, then raised wet, dryed tentered and put thro' the brushing mill.

The fine coatings are raised wet and brushed tentered and cut\*

(cropped, moised and cut).

The Baizes, Surges Strouds Bockings are only brushed on the tenters.

(f. 31.) Teasels

10 Teasels make a Gleaning a Stave a Stave a Pack

10 Teasels make a Gleaning to x30 x 45 = 13500 teasels in a Pack—

Cloth Dryhouse.

(f. 8o.) Pieces were tentered in the Top Room of the New Dryhouse on Monday Evening Dec<sup>r</sup> 5th 1814—this being the first time of its being used, (the bottom room not finished painting till Saturday Night following).

(f. 37.) Frizing.

To lay a frizing board boil a preparation of I Pint alegar,  $\frac{1}{4}$ Pint Spirit of Wine, 2 oz Isinglass and about 4 lb Irish glue; the Isinglass & Glue & Alegar should be laid in a warm place together overnight to make them more easily soluble. When the Glue &c is thoroughly dissolved put in Calais sand prepared as below directed till it is of the consistency of Paste; The frizing board should be pricked full of punch holes to make the composition stick better, and side boards nailed on to regulate the thickness; Lay the composition upon the board and smooth it with a strickle; scatter upon it a little sand and rub it in with the sand-stone, then lay it in a warm place to dry slowly: When the composition is set, the side boards may be taken off, by cutting thro' the sand by the side of them and the side smoothed. This being done the board must lay 5 or 6 days to dry or till it is quite hard, it must then be rubbed down with the sandstone and a little water till (f. 38) quite level. Then let it stay a day or two to dry. When dry it is ready for facing. If the board is greasy with working mix about I part Sp. wine with 2 parts of water, pour it upon the board and rub it about with the hand; then rub on a very little soft soap and a little sand: then upon rubbing the board with a sandstone the dirt will all rise to the top which must be washed off & the board laid in a warm place till perfectly dry—It is now ready for facing to do which rub on a little chalk and scatter a little sand, rub them together gently with the dry sandstone and blow the loose part off: then rub on the composition first mentioned with a soft brush and scatter the sand thro' the seeve quite smooth on the surface, taking Care that the Composition does not get dry nor set till the (f. 39) Sand is laid on thick enough; then wet the sandstone a little and rub the board once or twice over with it very lightly; that the sand may be well rubbed in and the board may be quite smooth scatter a little now on the top & leave it 24 hrs in a warm place to dry. When it is dry rub it well over with the sandstone and wipe it well with an old plush & the face will be quite open & the board in good order for frizing-

To prepare Calais sand get 2 seives Nos. I & 2 put the sand first thro' No 2 the coarsest which will cleanse it then lay it upon No I shake it a little and the fine parts will fall thro' and what

remains upon the seive must be reserved for use. The sand must be quite dry before it is used, and the boards always kept as dry as possible-

Before a piece is frized it must be dried as thoroughly as Possible or it will endanger the face (f. 40) by softening the board—

Frizes should be dressed thus. Raise them once over dry with old handles then turn the wool with breakers<sup>1</sup>; Reserve the britching handles for moising, crop the pieces lightly over with thick edged shears which will keep the bottom full. Now moise them: then shear them even he[el] and point.

Wisk the Backside and they are ready for laying on the Com-

position.

Prepare the composition thus. Mix about I pint rape oil with ½ lb or not quite so much treacle. Stir them well together till they unite-

For dark Colours: rub them slightly over with chalk then lay a little composition upon a brush and rub the piece over with the

brush—

For light colours rub on in the same manner Chalk and a little olive oil without treacle.

Scarlet pieces should be struck down with a fine (f. 41) card after coming from the tenter, and first thro' the mill without either oil or treacle excepting when the piece is to be renapt; when the old nap must be taken [off] with a card and then a little olive oil will freshen the colour.

Before raising, the piece should be rubbed over slightly with rape or olive oil, according to the colour above directed.

The chalk should be sawn in pieces about 9 inches long and 3 inches broad, let it be rubbed upon the piece as even, and as thin as possible.

Chalk may be put on all pieces except Scarlets and very greasy pieces which require more oil & less chalk than common pieces,

and no treacle.

Backsides need only striking with a card and putting thro' the mill without composition of any kind.

Fine pieces should be put thro three times coarse ones twice.

For the first time thro', the circle the mill throws should be about the 1/6 of an inch, the second 1/7, the third 1/8, if finished at twice it should be the 1/6 & 1/8 of an inch. The other things are best learnt by observing the mill.

## Glossers Compositions.

(f. 35.) Glossers Composition Oct 17. 1817—

45 lbs Oil, 4 lbs Bees' Wax 4 lbs Spermti 6 lbs Oil of Tartar,

6 oz Spirits of Lemon 2 lbs Soap—Mixed together—

(f. 56.) Glossing Composition is made with 12 lbs Oil 1 lb Wax. ı lb Spermaceti 1½ lbs Oil of Tartar 1½ oz Bergamot. Oil Wax & Spermaceti put together & heated till dissolved, then add the <sup>1</sup> New teasels.

Tartar and stir well together, heat 2½ Gallons of water to the same temperature as the Solution and stir well together. Stir now & then to prevent a scum rising to the top when cold add the Bergamot.

#### Prices for Dressing and Finishing.

(f 27.) Prices paid for Saving

Sav'd List 33 yds to 37 1/2 above 37 1/4 under 33 yds 1/18 to 20 yds 8d if fine 10d 24 to 32 /10d
Strouds or Cords 20 yds /10d Strouds or Cords 40 yds 1/8 Common S'd Blues about 20 yds 1/- about 33 yds 2/-Benj. Horsfall's I Shilling per End.

(f. 25.) Prices paid for Glossing.

Under 30 yards 7d—30 to 36 9d—36 and above 11d. Swansdowns 20 yds 6d.

(ff. 26, 27.) Prices paid for Dressing.

All Bean Ing Broad Cloths 10 shillings per yard and above, 16d in the pound 20/-

All Market Broad Cloths 13/- per yard and above, 16d in the Pound 20/-

Coloured Market Cloths under 13/- 13d in the Pound

10/-Bean Ing 13d

Whites except such as are included in the above statement 1/- in the Pound.

Allowed for brushing whites, dyed Scarlet, Crimson or any dark colour 3d under 30 yards 6d above 30 yards

Drabs, stov'd whites, Yellows, Buffs or any light colours nothing allowed—

Cassimeres of all sorts if coloured - 13d in the Pound 20/Do if White - 1/-

Allowed for brushing Cassimeres in all cases in which it is paid for broads 3d One Shilling paid for backing Naps extra, but nothing allowed for brushing Whites dyed for Naps.

15d in the pound Sattinets 3d per yard dressing 2d per Do Cords above 5 shillings per yard

Do not exceeding 5 shillings 2d per yd 1½d Fine Swansdowns

inferior ones Toilinets and Swansdowns finished as Toilinets 3d per yd

hard 3d ,, ,, Velveteens

I/- in the Pound dressing. Pelisses

Nothing allowed for brushing pelisses.

(ff. 28, 29.) Dressing Moleskins 2 d per yard id per yd. id over Dressing Common Coatings

Do Coatings which are not under 7/- per yard 2d per yard except 4d on pieces under 30 yds and 6d on pieces above 30 yds long which is deducted from the Amount on Cut Coating of all Prices.

Dressing Coatings 7/ per yd usually cut Tenters 3d per yard 9/6 and above Do 4d per yard

4d or 6d being taken off the amount as on the other sorts.

Coatings being returned from the Warehouse to dye strike or tenter and ½ per yd.

Lancashire Coatings; which are raised when bought per yd Tentering Balks long or short 3d each Tentering and brushing pieces sent from the Warehouse 6d each half thicks 6d each 4d each Do narrow Baizes 6d Broad Do Tentering Serges **4**d 1/-

Tentering and brushing water proof pieces if more than 30 yds long I/3

(ff. 30, 31.) Tentering pieces dyed in the Balk and brushed, above 30 yds 1/6 when not back'd or dressed

Pressing Broads 30 yards and above I/-Do 23 yds to 30 9d under 23 6d Toilinets for 45 yds 9d 9d Cassimeres Plains Serges, and Half Thicks 6d

The Price paid for Glossing Shags & Coatings is—under 30 yards 7d—30 to 36. 9d—above 36, 11d. [A late addition.]

#### (f. 7.) Steam Engine.1

The upper Scribbling Chamber takes	8½ Horse Power
Lower do — (blankets)	$14\frac{1}{2}$ Do
Stocks	$19\frac{1}{2}$
Ware Mill	$6\frac{1}{2}$
Shafts & Brushing Mill Indigo & Pumps	101/2
	503 Horse Power

(f. 33.) Experiments made in the Dye house Park Mill 9th Sep<sup>r</sup> 1800 by Joshua Dixon & Wm. Pritchard.<sup>2</sup>

At 7 O clock the Steam gauge standing at 4 inches, I opened the cocks of the several dying vessels as under; their Contents were previously taken as accurately as possible, as well as the steam, and a mark was made on the side of the vessel at the surface of the water, that the increase of condensation might be known. The steam cocks were opened one after another, so that as soon as the vessel arrived at the temperature 180° or thereabout, the cock was partly shut & another opened. In this manner I proceeded till the whole arrived at the temperature below, which occupied exactly 6 hours. By this means the whole number of vessels were nearly boiling together, at the conclusion of the Experiment. The boiler was filled with water the night before so high that it wanted no fresh supply till 10 o'clock, (f. 34) so that as will appear from the quantity of water evaporated, it must have contained nearly 750 gallons (wine measure) more than when it is at its usual level\* (measure). At 10 o'clock the boiler was supplied with 236 gals at 98°, at ½ past II with 266 gals, and at ½ past I2 with 240 gals at the same temperature which was found sufficient to furnish steam till the conclusion of the Experiment, when the water in the boiler was at the level as at the expiration of the first 3 hours.

From the above it appears that the quantity of water reduced to the state of Steam from the boiler was nearly 250 Gals per hour. 3 Cwt of coals raised the water from about 100° to the pressure first mentioned viz 2 lbs per sq inch, and the (f. 35) quantity consumed during the experiment was I Ton ½ Cwt or nearly 3½ Cwt per hour—

[The following appears to be the conclusion of the experiment.]

(f. 57.) Cheetham's Little Kettle containing alum Spirits & Wolds uncovered was raised to 210° covered 212°.

The Least Iron Vessel next to the Blue Dyehouse clean water was heated 209°—covered 211°.

<sup>1</sup> See also the specification of July, 1796, No. 83.

<sup>&</sup>lt;sup>2</sup> The names have been inserted by Dixon at some later time, whilst the text itself is a copy of the original account prepared in 1800, and has not been written before about 1810.

Large Copper Green Vessel Alum Fustic Chemic uncovered 211° covered— Large Scarlet clean water 209° covered 210°. Small tin drab Vessel a little Logwood 210½° covered 212°.

#### Estimated Annual Profit at Bean Ing, 1815.

(f. 61.) The Mill Profit upon carding & Scribbling varies from £135 to £153 per week, averaging about £140 in general[;] the number of Carders are 15[;] this makes each carder to earn £9 $\frac{1}{3}$  per week, but from this must be taken the slubbers wages about 32 Shillings per week 3 Children at 3/6 & a Carder filler at 5/6

The amount for 1813/1814 was nearly £7800

Allow  $\frac{1}{3}$  for the expenses in Cards, Wages &c: Profit per Annum £5200

The Percentage upon Cloths at a Penny in the Shilling for Broads and  $1\frac{1}{2}$ d upon Pelisses above 7/– pr yard averaged the same year about £4500

In the year 1812 at a time when we were manufacturing during May, June & July scarcely any thing but Army Cloth upon which no Percentage is taken, the average upon B. H's goods the whole year being precisely taken averaged exactly £29 pr Week—in round numbers suppose J.G.R. £40 $\times$ 52=2080

B.H. 
$$£30 \times 52 = 1560$$
  
B.R.  $£20 \times 52 = 1040$ 

Percentage on Spanish & Sup. wool was  $7\frac{1}{2}$  per Cent on English 5 pr Cent.

now suppose 18 Cloths pr week made by J.G.R. the wool of which costs at least £22 per cloth—

25 Cloths B.H. £10 Io [Cloths] B.R. £7

Cloths 18 £22 £396  $\downarrow$  250 £716 at 5 pr cent. £35 per week  $\times$  52 10 7 70  $\uparrow$ 

Dye House I should suppose about pr annum

£2000

£1820

£4680

£13700

Profit on Milling [not given]

Aug. 4, 1815.

(f. 79.) The Number of People employed at Bean Ing Sept. 29<sup>th</sup> 1813 taken by J.D.

	j. tancir by j.D.
	5 Manufacturers ( I Overlooker
9	Wool buyer 94 2 Pearkers
,	
	3 In the Counting House Burling \ 10 Knotters & Letterers
	Chamber   62 Raw Thread Burlers
4.0	1 Overlooker 19 Dressed Cloth Do
43	{ 5 Boys
Wool	1 Southern
Room	4 Sorters 2 Overlookers
	(33 Moaters   1 Frizer
	92 Croppers
	[ I Overlooker II3   8 Apprentices
52	
Upper 2	25 Pieceners Shops 2 Press Boys
Scribbling	⟨ 8 Carder Filler[s]
	7 Scribbler Do 2 Boys
Room	2 Cleaners
	8 Pattern Dyers
	[ I Overlooker 41 { 8 Blue Dyers
	2 Slubbers Dyehouse 14 Savers
	6 Pieceners 7 Loosers
52	
Lower	4 Fillers ( I Engine Man
Scribbling	₹ 5 Bk Spinners¹
	21 Pieceners [6] 1 Size Boiler
Room	9 Fillers Dryhouse— 4 Wool dryers
	2 Cleaners 1 Cloth Dryer
	2 Willowers
	2 2 Cloth & yarn Scourers
	[17 Spinners J.G.R. & Stovers
	16 Do B.H. I I [fine] Drawer
	8 (Do B.R.
	4 Do J.D. 6 \( \) I Slaymaker
70	3 Do J.M. Slaymaker 5 Boys
Spinners'	₹ 2 Mules Spinners
Room	1 a Porra
100111	
	Joiners & Sawvers &c
	7 Warpers I I Cook
	1 Overlooker 4 4 Blacksmiths
	6 6 Carters &c
	49 Weavers B.R. I Porter
т82	46 Do B.H.   I Wood Grinder   1 Gass Maker   21 Winders B.H.   Engine Man   15 Do B.R.
183 Weaving	₹ 38 Do J.G.R 3 ₹ 1 Gass Maker
weaving	21 Winders B.H. I Engine Man
Shops	15 Do BR
	The De LCP
	[14 Do J.G.R. 289
	417
8	8 Millers & Stockers 706
$\mathbf{Mill}$	706
	36 Night Workers in the low Scrib-
ATM	
417	<u>-</u>
	1 Engine Man
	744 No of Doople Employed
	744 No of People Employed
	not including any working out.
	Messaw   Weavers II
	Moscow   Weavers II   [Winders]   6
	76 <b>1</b>

<sup>&</sup>lt;sup>1</sup> Blanket Spinners, for the distribution of power from the "Steam Engine" on p. 305 has "Lower Scribbling Chamber (blankets)."

# (ii). THE PATTERN BOOK OF WILLIAM GOTT. BY W. B. CRUMP, M.A.

This is a substantial foolscap volume, two inches thick, halfbound in paper-covered boards, with the name and date 'Wm Gott, Augt 1815' on the first page. It was presented to the University of Leeds by Mr. John Gott and, after being carefully proofed to stop the ravages of the clothes-moth larvæ, by Mr. J. B. Speakman of the Textile Department, the samples of cloth that it contains are now, with few exceptions, in excellent condition and their colours as fresh as when they were dyed or woven. The volume is a record of the training received by William Gott in the dyehouse and the wool-blending department when he was eighteen years of age. Beginning in August the first twenty-five folios are filled with 71 samples of dyed cloth and yarn, with corresponding recipes; and these represent work carried out, probably in the 'Pattern' dyehouse, up to the beginning of November. It was clearly routine work at which he was assisting and at the same time receiving instruction. Then there is a break, with many blank folios, and his record commences again on f. 43, late in December, in the Blue dyehouse, but only the beginning of the preparation of the indigo vat is entered. There is one more sheet (f. 74), undated, of dye patterns that differs from everything else in the book in being purely experimental work, such as a student now does at a Technical school.

The wool blending came later for the samples of cloth fill ten folios towards the end of the book, but there are no further dates. The first two folios may represent individual work, for the quantities blended are small, the records meagre and the specimens tiny; but the remainder deal entirely with cloths manufactured in the mill and identified, like the cloths passing through the dyehouse, by the mill numbers. As there are over a hundred samples of these mixture cloths, with every detail of the wools blended and of the dyeing, and the prices throughout, it is obvious that these record a large body of facts relative to the practice at Bean Ing.

It is not proposed to do more than offer a selection from the contents of this Pattern Book, with sufficient comment to make them intelligible. The dyehouse recipes have not been printed in the tabular form in which they were written, so that it became necessary to punctuate them, but this is the only change.

#### Dyehouse Patterns.

The first set (ff. 1-25) is made up of 71 distinct batches, either of cloth or varn, with sample of the dyed product, numbered consecutively to no. 64. In some of them, as will appear, there are several samples. Occasionally the length of cloth is only a few yards, but usually a whole piece, or two, three, or more pieces, commonly called 'ends,' and of yarn, so many hanks. The operations and ingredients of the dye-vat are set out one under the other, finishing with the formula 'wind up' (or 'take out') 'beck.' The last word is clearly written throughout and means wash in a stream of running water. It is reminiscent of the time when the pieces were washed in the beck close at hand.

Pelisse Nº 76310 Lac red Aug. 1815

Let the water boil, put in 4 lb. of lac, 4 pints of lac spirit, 2 lb. of tartar—after boiling \(\frac{3}{4}\) hour wind up [add] \(\frac{3}{4}\) lb. of Cudbear, boil 3 hour more, wind up, beck.

Aug. 1815 Pelisse No 79111 10½ yds Crimson 5
Purify the water with 1 pint of nitrate of tin, ½ dish of Bran, then boil and put in ½ lb. of Alum, 1½ lb. of Tartar, 1 pint of Spirit, 8 oz of Cochineal, put in the cloth & boil \( \frac{3}{2} \) hour, wind up, beck. [Sample].

Clear out the vessel, put in fresh water, boil 3 lb. of Cudbear, after the water has boiled a few minutes turn off the steam and put in I gallon of wash,2 let the cloth remain in ½ hour without

steam, wind up, beck.. [Sample].

Without any Cudbear and with wash alone.. [Sample].

Nos 8-16 are pieces that were sent down from the Aug. 1815 warehouse to be re-died

> 3 Ends Brown Pelisses

In an old Olive vat put 2 lb. of Argal, 2 lb. of Alum, 20 lb. of Old chip Fustic, 5 lb. of Madder, I table spoon full of Chemic,3 boil I hour, wind up, beck.

Three samples as received, light brown, light blue and olive

green; three samples dyed brown.]

The cloths in batches 8-16 were all pelisses, many of them twilled, and were all re-dyed brown or claret, mostly with cudbear and madder and various mordants.

Swandown Yarn for fancy Waistcoats. 6 Hanks each 840 vds: Pink.

Purify the water with bran & nit [rate] of Tin; 1\frac{3}{4} oz. of Cochineal. 1 lb. of Tartar, 3 pint of Nit. of Tin; boil 20 minutes, take out, beck.

<sup>&</sup>lt;sup>1</sup> See E.D.D. where beck, sb. W. Yks., is given as a "trough divided into compartments, through which pieces are passed, after dyeing, to wash off superfluous dye. A constant stream of clean water runs in at the shallow

<sup>&</sup>lt;sup>2</sup> Wash: as before, stale urine. <sup>3</sup> Chemic: bleaching powder.

Sep. 1815 Swandown Yarn 48 Hanks. Orange 27 Purify the water;  $[3\frac{1}{2} \text{ lb.}]$  of Young Chip Fustic; let this boil in a bag for  $\frac{1}{2}$  hour take out the bag:  $\frac{3}{4} \text{ lb.}$  of Tartar,  $\frac{1}{4}$  oz. of Cochineal; boil  $\frac{3}{4}$  hour, take out, beck.

Swandown Yarn 24 Hanks L<sup>t</sup> Blue 29
Purify the water; I table spoon of Chemic,  $\frac{3}{4}$  pint of nit. of Tin; boil 10 minutes, take out, beck.

Sep. 1815 Bearskins Nos 4509, 4510. Drab 30 30 3 lb. rasp'd Logwood, 4 lb. rasp'd old Fustic; boil in a bag 4 hour, take out; 2½ [lb.] of Argal, 4 lb. of Cudbear, 1½ [lb.] of Copperas; boil 20 minutes, wind up, beck.

Sept. 1815 I Shawl<sup>1</sup> [Yarn] Scarlet 33
Purify the water, [add] 1½ oz. of Cochineal, 2 oz. of rasp'd young Fustic, I lb. of Tartar, ½ pint of nit[rate] of Tin; boil I hour, take out, beck.

Plains, No 4485, 8 yds. Yellow 34
Purify the water; 5 bundles of welds, 5 lb. of chip old Fustic,
4 lb. of Alum, 1 pint of nit. of Tin; take out Welds put in the
piece, boil 40 minutes, wind up, beck.

Oct. 1815 Blanket Yarn 120 Hanks Saxon Blue 57
Boil the water, put in 1½ pint of chemic, 6 lb. of Alum; 1½
hour, take out; cool down the water to 190° before the yarn is put in and so let it remain till it is taken out, it must not boil.

Oct. 1815 Ladies Cloth 2 Ends, 20 yds, 23 yds. Orange 59 2 lb. of young Fustic, 8 oz. of Cochineal, 3 lb. of tartar; boil I hour, wind up, beck.

Oct. 1815 Bearskins, 4 Ends, 52 ins. wide Logwood Blue [66] 2 lb. of copperas, ½ lb. of blue vitriol, 8 lb. of alum, 8 lb. of Argal; boil 3 hours, wind up, beck.

Empty out the vessel, fill with clean water, boil, put in 36 lb. of Logwood, 8 gallons of wash; boil \( \frac{3}{4} \) hour, take out, beck.

Dec. 1815 Blue Dying Vat. No 1. containing 1686 gallons

Dec. 20, 3 P.M. Clean the vat out & fill it about  $\frac{1}{2}$  full of old liquor taking some out of every vat; in this liquor there was about 8 lb. of Indigo at 5/8 per lb.

There was put into this 6 cwt. 3 qr. 14 lb. of woad at £32 per ton; stir up very well with rakes & leave the woad to soften.

5 P.M. Stir again till all the woad is softened, leave a few minutes to settle, fill with water, heat to 160, put in 4 lb. of crop madder at 14 pence per lb, 10 lb. of Indigo ground to powder in water at 5/8, 2 dishes of lime each containing 5 lb. at\*

\*the lime will not be brought in till the end, stir & cover

up for the night.

Dec. 21, 7 A.M. 10 lb. of lime, stir, cover up 11 A.M. 10 lb. of lime, stir & cover up

<sup>&</sup>lt;sup>1</sup> Shawl: a ladies' cloth, apparently with a cotton warp.

3 P.M.  $2\frac{1}{2}$  lb. of lime, stir & cover up

6 P.M. I lb. of crop madder, stir & cover up for the night

22½+10 lb. of lime=32½ lb.

Dec. 22nd 1815. The Vat began to work at 6 o'Clock in the morning, stir it up with rakes & cover up for I hour, it is then ready for working.

Dec. 24 78 Yds Cassimere [The MS. breaks off at this point.]

MIXTURE-CLOTHS BY WOOL-BLENDING.

Mixture cloths were obtained by first selecting wools of suitable quality, of one, two, or up to six kinds, dyeing one or more lots of them and then blending these with the undyed or white lots in the willies or willows. As a rule, five stones of English wool or 4 st. 4 lbs. of Spanish, went to make one piece of broad cloth, and three stones a narrow cassimere. One or two examples expanded from the details recorded in the Pattern Book will serve to explain the compact formula that accompanies each sample of cloth woven from such blended wools. The pages are ruled into sixteen squares, with a sample of cloth with its mill-number in each, and above it the details.

Thus the first treated in detail, no. 33, shows a mottled bluish cloth (83017), made from 5 stones of Saxony wool at 7/3. Half of this was dyed 'bloom' colour, a very favourite choice for the more expensive mixtures and probably an indigo blue. The value of the dyed wool is always stated per stone (P.S.). So the two components are given under each other: 2<sup>st</sup>-8<sup>lbs</sup> Bloom at 16/- P.S. 2-8 White. The third and final entry relates to the cloth, giving its dimensions and price—the latter occasionally in cipher. In the first examples these are written in full— $43\frac{1}{2}$  yds. long, 58 ins. wide, 18/1. is one of the highest priced cloths.

Actually the records are set out in this fashion:

39	42
4–4 Spanish at 5/9	3-o Norfolk 3/8
	2-0 Saxon 4/10
3-3 Corbo at 8/- PS	3-o Green at 16/- PS
I-I White	2-o Cinnamon 8/-
42 long—58 broad—14/3½	38 long—58 Broad—14/7

In no. 39 only one wool is selected and one-quarter of it is left in the white, and the rest (3 st. 3 lbs.) dyed corbeau, a shade of black. In no. 42 3 stones of Norfolk wool are dyed green and blended with 2 stones of Saxony wool dyed cinnamon colour. The result is a cloth of a brownish hue, but with the green and cinnamon perfectly distinct in an irregular pattern. The blends may be more complex, as shown in the make of the following cheaper cloths made from English wools—both resembling no. 33, though lighter coloured:

The only cloths named are cassimeres, of which there are eight samples. These differ chiefly in being narrow cloths of a great length; mostly they are made from Saxony and Spanish wools, but there is one example of a cheap cassimere.

Later samples include examples of French wool in the blend.

At the end, on the last two folios, are samples in sets of four of what may be called competitive cloths, as nearly alike as possible in colour and look, but varying greatly in price according to the blend of wools. The first sheet shows eight sets of grey mixtures, of which the following set 3 will serve as an illustration. They all bear the mill numbers.

(1) 
$$3-5$$
 Saxon  $6/6$  Black  $1-11$  Saxon  $7/6$  White  $39\frac{1}{2}-58-19/-$  (2)  $2-8$  Norf.  $3/8$  Black  $2-2$  Span.  $5/6$  White  $39\frac{1}{2}-58-19/-$  (3)  $1-6$  Wilkins  $2/6$  Black  $1-8$  Norf.  $2/8$  (4)  $1-6$  New Mill  $1/8\frac{1}{2}$  I-10 Lindley  $1/3\frac{3}{4}$  7 Benson  $1/-\frac{3}{4}$  10 Do.  $1/3\frac{1}{2}$  1-2 Lindley  $2/3$   $1-2$  Lindley  $1/3\frac{1}{2}$  1-2 Lindley  $1/3\frac{1}{2}$  1-3 Black 1-6 White  $1/3\frac{1}{2}$  1-6 White

The last sheet illustrates similar but more varied shades of brown, obtained by combining blends of olive and yellow, corbo and buff, brown and white, as well as the favourite cinnamon and green. There is a similar range of prices in a set from a cloth of eight or nine shillings a yard to one over twice the price.

## Trade Potices, Pewspaper Advertisements and Extracts

COLLECTED BY MISS EMILY HARGRAVE AND W. B. CRUMP, M.A.

The following selection of advertisements and other matter, chiefly from the files of the Leeds newspapers, has been made to illustrate the state and progress of the woollen industry during the period under review. Many of them relate to the equipment of scribbling mills, dressing-shops or dyehouses in the Leeds area, although a few advertisements of mills or plant outside the area have been included for various reasons; e.g., no. 148 provides the first reference to a scribbling-machine, at Huddersfield, and the plant in Hebble Mill, near Halifax (no. 181), is remarkable for its size and variety. So also three others (nos. 162, 177 and 180) have been included, though they relate to the spinning of cotton and worsted and not of woollen yarn.

The long protest against the use of scribbling-machines in 1786 (no. 153), and the remarkable proclamation of the cloth-merchants in 1791 that was only issued as a broad-sheet, are material of a different character and have contributed in no small degree to an understanding of the period. Though the one was as progressive in spirit as the other was anti-progressive, each proved to be equally futile.

#### Abbreviations:

L.I. =Leeds Intelligencer. L.M.=Leeds Mercury.

145 At Gautiers Dyehouse in Leeds. Clothier's Wooll dyed in the most lively Colours and at the lowest Price. L.I.—May 28, 1765.

146 To be Lett, and entered to immediately.

Situate upon the River Wharf on the great Turnpike Road leading from Tadcaster, through Otley to Skipton, about two measured miles from Otley aforesaid, five from Horsforth, six from Yeadon, Guiseley and Rawdon and nine from Leeds. All that Fulling Mill called Pool Walk Mill containing three Wheels and Six Stocks, five of which are used for the Milling of Cloth, and the other is used for the Milling of Leather.

L.I.—July 5, 1768.

147 To be Sold. By William Harrison of Mill Hill who has

declined Business. Four compleat Presses with good Papers, together with Sheers, Boards and all other Utensils necessary for

the Dressing of Cloth. The Work Shops (in which sixteen men may be employed) are to be lett and entered upon at pleasure. The Rowing House is well supplied with Water from an adjoining Spring and two Cloth Tenters may be taken in the neighbourhood, and in Case Packing Shops for a Merchant should be wanted, two large ones may be taken in the same Yard. At the same place is a remarkably fine Cold Bath, which has given great relief in the rheumatism and many other complaints particularly in the cure of Sore Eyes. Enquire of William Harrison as above.

L.I.—June 27, 1769.

148 To be Sold. A complete Scribbling-machine, with new Rollers, carrying 46 Pairs of Cards with Iron-geer in good Condition; together with an upright Shaft, Swimming Wheel and Nutt (capable to carry 4 machines) with the Tumbling Shaft and Nutt. Also a smaller Machine of seven Barrels or Rollers with cards in good Condition. Likewise a Teazing Mill, on a new construction with the Geer thereunto belonging, to go by water. Particulars may be had by applying to J. Kenworthy of Huddersfield, the owner.

L.M.—Jan. 26, 1779.

149 To be Lett or Sold. A Dyehouse and Warehouses in Swine gate Leeds, also to be sold the Utensils belonging the same Dye house, consisting of two Vatts, three Leads, two Pewter Vessels, an Indigo Mill, a Conedroy and Swidging Plate, three Pair of 30 yds Double Tenters and other articles. Apply Messrs Horner and Turner Merchants Park Row Leeds. L.M.—Mar. 2, 1779.

150 On Tuesday last one Mr George Claus, from Aix la Chapelle in Germany, who had resided a few months in this town, was taken up & examined at the Rotation Office in Call-Lane, for having in his possession a machine for spinning woollen-yarn before it is made into cloth, as practiced in this neighbourhood. The machine was shewn to the Magistrates, when on the clearest evidence, as well as what he had to say in his defence, he would have been committed to York Castle to take his trial next month, had he not requested to be admitted to bail & found three sureties for his appearance in 150<sup>1</sup> each, & himself in 200<sup>1</sup>. The machine had been above a week at his lodgings, where he had set it up, & actually practiced on it; but when seized, it was nailed up in a box, covered with a wrapper, stuffed with straw, marked G.C. No 1., & was to have been sent to London that or the next day. On Wednesday morning he set off for London; & from his being well recommended to the merchants, having plenty of cash, & being very ingenious, there is no doubt that his sole business was to have stole patterns both of our spinning & scribbling-machines, a model of the later being making at Armley; and at Hunslet he had engaged a clothmaker & his family to go with him, on promise of 1001 a year. We hope all persons concerned in managing these machines will, for the future, take care how they suffer unknown persons to make observations on them, as the consequences to this country may be L.M.—Feb. 6, 1781. very fatal.

151 To be Sold. Situate at Guiseley, A Messuage and Two Scribbling-Mills, called Guiseley Mills, with three Closes lying near, containing 16 acres, in the occupation of Lister, Wood and Stubbs, and one close of James Ambler. Enquire of Mr. Lister of Manningham.

L.M.—Nov. 6, 1781.

To be Sold. Six Hot-Presses, with Plates, Papers, and other necessary Implements belonging them. Three with Iron Top & Bottom Pieces nearly new, the Screws very good, and running in Brass Boxes. Three with Wood Top & Bottom Pieces, the Screws running in Iron Boxes. For Particulars Enquire of William Carr & Son, Dyers, in Leeds.

L.I.—April 9, 1782.

153 To the Merchants, Clothiers and all such as wish well to the Staple Manufactory of this Nation.

The Humble Address and Petition of Thousands, who

labour in the Cloth Manufactory.

SHEWETH, That the Scribbling-Machines have thrown thousands of your petitioners out of employ, whereby they are brought into great distress, and are not able to procure a maintenance for their families, and deprived them of the opportunity of bringing up their children to labour: We have therefore to request, that prejudice and self-interest may be laid aside, and that you may pay that attention to the following facts, which the nature of the case requires.

The number of Scribbling-Machines extending about seventeen miles south-west of LEEDS, exeed all belief, being no less than one hundred and seventy! and as each machine will do as much work in twelve hours, as ten men can in that time do by hand, (speaking within bounds) and they working night-and day, one machine will do as much work in one day as would otherwise employ

twenty men.

As we do not mean to assert any thing but what we can prove to be true, we allow four men to be employed at each machine twelve hours, working night and day, will take eight men in twenty-four hours; so that, upon a moderate computation twelve men are thrown out of employ for every single machine used in scribbling; and as it may be supposed the number of machines in all the other quarters together, nearly equal those in the South-West, full four thousand men are left to shift for a living how they can, and must of course fall to the Parish, if not timely relieved. Allowing one boy to be bound apprentice from each family out of work, eight thousand hands are deprived of the opportunity of getting a livelihood.

We therefore hope, that the feelings of humanity will lead those who have it in their power to prevent the use of those machines, to give every discouragement they can to what has a tendency so prejudicial to their fellow-creatures.

This is not all; the injury to the Cloth is great, in so much that in Frizing, instead of leaving a nap upon the Cloth, the wool

is drawn out, and the Cloth is left thread-bare.

Many more evils we could enumerate, but we would hope, that the sensible part of mankind, who are not biassed by interest, must see the dreadful tendancy of their continuance; a depopulation must be the consequence; trade being then lost, the landed interest will have no other satisfaction but that of being *last devoured*.

We wish to propose a few queries to those who would plead

for the further continuance of these machines:

Men of common sense must know, that so many machines in use, take the work from the hands employed in Scribbling,—and who did that business before machines were invented.

How are those men, thus thrown out of employ to provide for their families;—and what are they to put their children apprentice to, that the rising generation may have something to keep them at work, in order that they may not be like vagabonds strolling about in idleness? Some say, Begin and learn some other business.—Suppose we do; who will maintain our families, whilst we undertake the arduous task; and when we have learned it, how do we know we shall be any better for all our pains; for by the time we have served our second apprenticeship, another machine may arise, which may take away that business also; so that our families, being half pined whilst we are learning how to provide them with bread, will be wholly so during the period of our third apprenticeship.

But what are our children to do; are they to be brought up in idleness? Indeed as things are, it is no wonder to hear of so many executions; for our parts, though we may be thought illiterate men, our conceptions are, that bringing children up to industry, and keeping them employed, is the way to keep them from falling into those crimes, which an idle habit naturally leads to.

These things impartially considered will we hope, be strong advocates in our favour; and we conceive that men of sense, religion and humanity, will be satisfied of the reasonableness, as well as necessity of this address, and that their own feelings will urge them to espouse the cause of us and our families—

Signed, in behalf of THOUSANDS, by

Joseph Hepworth Thomas Lobley
Robert Wood Thos. Blackburn.

L.I. & L.M.—June 13, 1786.

Wednesday 27 of Feb. 1788. All those Capital, Ancient, and well accustomed Fulling-Mills, Scribbling-Mills and Corn-Mills, called and known by the name of Armley Mills or Burley Mills to-gether with the Housing, Buildings, Land and other the premises thereto belonging, and now therewith occupied by Mr John Walker who hath been Tenant thereof for a Long Time past. Armley-Mills are upon the banks of and adjoin to the Leeds Canal, (only distant from Leeds one mile) and so situated that a Purchaser may make such Buildings, Improvements, and Conveniences for carrying on an extensive Trade and Business of Fulling, Scribbling, Willowing,

Carding and Spinning of Sheep's and Cotton Wool, Grinding of Corn, Sawing of Timber, & Slitting of Iron; Tobacco, Snuff, Leather and Paper Mills and other Improvements now made use of by water, in the most Extensive Line, there being such plenty of water and convenience for erecting a number of Mills thereon that no Situation in the West Riding of Yorkshire is superior if any equal thereto. The Purchaser may be let into the immediate Possession of all the Lands (except the Steanards) and of the Steanards and all the said Mills, Barns and other the Premises on the 1st Day of May next. L.I.—Feb. 5, 1788.

To the Clothiers in the Town and Neighbourhood of Leeds. We, the Trustees of the Mixed Cloth Hall in Leeds, fully sensible of the great Advantages likely to arise to the Manufacture of Broad Woollen Cloths by the very compleat manner in which the Fulling Mills in Armley are now finished, think it our duty to return thanks to Thomas Lloyd Esqr for the great expence he has incurred in the erection of so arduous an undertaking and for the accommodation his Fulling Mills will render to a part of the Manufacturing Country, hitherto so much distressed for the want of such convenience that the Clothiers in a dry season were often compelled to go eight or ten miles and sometimes even more to get their Cloth milled.

We also sincerely hope that our Brethren the Clothiers will give every encouragement in their power to the above Mills, that the owner may receive such reimbursements as his public spirit deserves, for the completion of so patriotic, so praiseworthy an

undertaking.

In the above Mills there are no less than 18 Stocks of various sizes & of different constructions; so that we may fairly venture to affirm that 50 Pieces of Woollens may be on the Looms today & be milled & upon the Tenters to-morrow. Signed by the Trustees.

L.M.—Jan. 12, 1790.

## The Cloth Merchants of Leeds

BEING informed that various Kinds of MACHINERY, for the better and more expeditious DRESSING of WOOLLEN-CLOTH, have been lately invented, that many such Machines are already made and set to work in different Parts of this County, and that great Numbers more are contracted for, to be used in the Dressing of Cloth in other Parts of Yorkshire, and in the Counties of Lancaster, Derby, Chester, Wilts and Gloucester, thought it necessary to meet together on the Eighteenth of October, to take into their most serious Consideration what Steps were needful to be taken, to prevent the Merchants and Cloth-Dressers in other Parts, from diminishing the Staple Trade of this Town, by the Enjoyment of superior Implements in their Business.

At the said Meeting, attended by almost every Merchant in the Town, the above Facts did clearly appear, and after a Discussion of the Merits of various Inventions, and the Improvement in Dressing likely to be derived from them, it appeared to them all, absolutely necessary that this Town should partake of the Benefit of all Sorts of Improvements that are, or can be made in the Dressing of their Cloths, to prevent the Decline of that Business, of which the Town of Leeds has for Ages had the greatest Share, and which from its local Advantages, we presume may be maintained and increased, provided the Merchants, and Dressers of Cloth, in Leeds, do not neglect to use the best Means in their Power, of performing their Work to the utmost Perfection.

In order that the Matter should be undertaken on a Plan to afford every possible Information, a Committee was then appointed for the Purpose of obtaining one of each of the different Machines now in Use, on the most approved Construction, and a Subscription was entered into for defraying the Expence thereof, and to enable them to obtain an eligible Situation for erecting and working them, for the Inspection of the Trade, previous to their being brought

into general Use.

At a time when the People, engaged in every other Manufacture in the Kingdom, are exerting themselves to bring their Work to Market at reduced Prices, which can alone be effected by the Aid of Machinery, it certainly is not necessary that the Cloth Merchants of Leeds, who depend chiefly on a Foreign Demand, where they have for Competitors the Manufacturers of other Nations, whose Taxes are few, and whose manual Labour is only Half the Price it bears here, should have Occasion to defend a Conduct, which has for its Aim the Advantage of the Kingdom in general, and of the Cloth Trade in particular; yet anxious to prevent Misrepresentations, which have usually attended the Introduction of the most useful Machines, they wish to remind the Inhabitants of this Town, of the Advantages derived to every flourishing Manufacture from the Application of Machinery; they instance that of Cotton in particular, which in its internal and foreign Demand is nearly alike to our own, and has in a few Years by the Means of Machinery advanced to its present Importance, and is still increasing.

If then by the Use of Machines, the Manufacture of Cotton, an Article which we import, and are supplied with from other Countries, and which can every where be procured on equal Terms, has met with such amazing Success, may not greater Advantages be reasonably expected from cultivating to the utmost the Manufacture of Wool, the Produce of our own Island, an Article in Demand in all Countries, and almost the universal Cloathing of Mankind?

In the Manufacture of Woollens, the Scribbling Mill, the Spinning Frame, and the Fly Shuttle, have reduced manual Labour nearly One-third, and each of them at its first Introduction carried an Alarm to the Work People, yet each has contributed to advance the Wages and to increase the Trade, so that if an Attempt was now

<sup>&</sup>lt;sup>1</sup> The name cannot be taken as referring to Arkwright's Frame, but to the jenny which was also built up in a frame.

made to deprive us of the Use of them, there is no Doubt, but every Person engaged in the Business, would exert himself to defend them.

From these Premises, we the undersigned Merchants, think it a Duty we owe to ourselves, to the Town of Leeds, and to the Nation at large, to declare that we will protect and support the free Use of the proposed Improvements in Cloth-Dressing, by every legal Means in our Power; and if after all, contrary to our Expectations, the Introduction of Machinery should for a Time occasion a Scarcity of Work in the Cloth Dressing Trade, we have unanimously agreed to give a Preference to such Workmen as are now settled Inhabitants of this Parish, and who give no Opposition to the

present Scheme. Appleby & Sawyer Bernard Bischoff & Sons George & Thomas Bischoff Richard & Robert Bramley John & Edward Brooke James Brown & Co. Blesard & Arthington William Brigg & Son Thomas Cookson & Son Horace Cattaneo

John Clapham William Denison & Co. Dixon, Turkington & Scurr

John Dobson Emanuel Elam Fenton & Wainhouse Fisher & Nixon

David Farrar, Sons & Co. Garland & Winter Grainger & Wilkinson John Hebblethwaite Thomas Hill & Sons Hainsworth & Co.

Jones, Havard, Rodbard & Co.

Joseph Ingham

Johnsons Thomas & Richard Lee & Son Lupton, Mellin & Sharpe

Edward Markland Richard Mathewman

Rich. & John Micklethwaite

Leeds, November 18th, 1791.

Benjamin Murgittroyd

Pim Nevins William Naylor

Samuel Oates, Sons & Co.

Oates & Kighley Phillips, Oates & Co. Plowes & Walker

Powell, Sutton & Ward Ridsdale & Beaumont

Roper & Reyner Matthew Rhodes

Jeremiah & Abraham Rhodes

Rawsthornes & Keyworth Christopher Routh & Son

Smithson & Rayner

Whittel & Jos. Sheepshanks

Thomas Storey Strothers

Alexander Turner & Co.

Tidswell, Cusson & Co.

Christopher Topham Peter Tolson & Sons

Thursby, Dunn & Co. Wormald, Fountain & Co.

Wolrich, Stansfeld & Co.

Thomas Wade & Browne

Joseph Wright

Joseph Wrigglesworth

Robert Wareing

Wood, Sturdy & Co.

[Broadsheet, Thoresby Society.]

157 A Dye House and Press Shops. To be lett. Situate at Oulton about 5 miles from Leeds and nearly the same distance from Wakefield.

The Dye House is at present in employment and the occupier purposes to continue the business until a proper tenant can be met

with, but wishes to decline August or September next.

The Utensils fixed in the Dye House are as follows: Three Scarlet Vessels, Seven Lead Vessels, Three Iron Ditto, Five Blue Vats, a Lead Cistern, Pipes etc. In the Press Shops are 8 Presses with Iron Tops and Bottoms. Six Ditto Wood Tops and bottoms and Iron Sides—Five Iron Ovens and a quantity of Irish Plates sufficient to fill the Presses. A Water Mill for grinding Indigo and a Stock for cleaning Black and Blue Cloth also a Horse Mill for Stock washing Scarlets and other light Colours, etc. Enquire of Mr Sigston, Oulton.

L.M.—June I, 1793.

To be sold on Tuesday next the 28 Inst. at Mr Christopher Crowthers, merchant in Gomersall who is declining the Cloth Business. About 200 yards of Broad Tenters, 3 Stang Presses with Plates and Papers suitable, an Iron Oven with Grate, etc., 20 Pairs of Sheers, 3 Sheer Boards, 2 Dubbing Boards, Racks, Handles, Perches, Packing Press Tables & other Utensils in the Dressing Line.

L.M.—Mar. 23, 1793.

To Press Paper Makers. Wanted Immediately a Man that understands the making and cauching etc. of the same where good Wages and Encouragement are given. Apply to Thomas Wright.

L.I.—March 25, 1793.

160 To Woollen Manufacturers. Wanted a steady, sober man capable to take the management of making Cloths of Coarse White Wool which is spun on Jennies and he to spin one occasionally, he must write a decent Hand and be able to keep accounts. A Married Man would be preferred. Apply to Printer of this Paper.

L.I.—Ap. 29, 1793.

To be Sold by Private Contract. Situate near Balm Beck in Hunslet in the Parish of Leeds. All that Scribbling Mill consisting of Five machines and a Willey turned by a Fire Engine, also a Scribbling Machine and a Carding Machine turned by a Beck or Rivulet called Balm Beck, together with two Billeys. Thomas Rainforth of Hunslet will show the premises. L.I.—Oct. 28, 1793.

To be Sold. About eighteen hundred Spindles with the necessary Preparing Machinery lately erected for the spinning of Wool. The above Machinery is on a good construction and the Yarn spun upon them has met with a good Reception in every Market where it has been exposed for Sale. The length of the Spindle Frames 16 ft. 9 inches. Width 3 ft. 9 inches, and each frame contains 60 Spindles. Apply Benj<sup>n</sup> Goodman, Leeds. L.I.—Nov. 18, 1793.

To be Lett. The Nether Mills, situate in Leeds, containing Five Water Wheels with the machinery thereto belonging. The Two Wheels employed in Fulling Cloth are capable of carrying Four Pushing and Five Falling Stocks. One other wheel in the West Angle carries Five Machines for Scribbling Wool. One very

powerful Wheel is now appropriated for spinning Cotton, and the other wheel conducts the extensive Works for Rasping etc. Dyeing Wares. There are two Capital Frizing Engines which may be set up at small expense. L.I.—Jan. 13, 1794.

164 Wirework and Cards. The Partnership between Wm. Varley and Son, Wireworkers and Cardmakers of Hunslet being dissolved by the death of Wm. Varley the elder, the business will in future be carried on by his surviving partner, under whose direction it L.I.—Feb. 17, 1794. has been for some time.

165 To Mill Wrights and Machinery Makers. John Jubb, Millwright and Machine maker, Leeds, is in want of 3 journeymen Millwrights and the same number of Joiners who have been accustomed to work at Scribbling and Carding Machines, also a Whitesmith who understands the above Businesses. An apprentice is also wanted.

The above John Jubb makes different kinds of Thrashing Machines for 30 or 60 guineas each, either to winnow at the same time or not. The smaller sort will Thrash three and the larger one six Loads in one hour. L.I.—June 2, 1794.

166 Stolen from Tenters in Hunslet Lane. A whole Piece of Stoved White Quilled Coating 28 yds. & a half in Length & 52 inches in Breadth of the value of 3/1 per Yard in the Balk.

L.I.—April. 21, 1794.

167 Gomersall. To be Lett. A large new erected Scribbling Mill and Corn Mill wrought by a Steam Engine. Situate at Castle Hill in Gomersall. The Scribbling Mill contains 8 engines for scribbling and carding Wool. Apply Mr Tweedale.

L.I.—August 4, 1794.

168 The Merchants of this Town, Halifax, Wakefield, and other manufacturing places, we hear intend petitioning the Admiralty for Convoys to sail from Spithead for Spain, Portugal etc. in the ensuing year at the following times—about 20th January, 20th March, 20th June, 20th July, 20th August, 30th October. L.I.—Nov. 24, 1794.

169 Bramley. To be Sold By Auction...on Thursday 30th November at the House of Peter Drummond, Innkeeper in Bramley. Lot I A new Brick Dwelling House....half a close....and joint Use of Pump and Dyehouse....

Lot II Another new-erected Dwelling House....with joint Use

of Pump and Dyehouse.

Lot VI All that spacious New Building used as a Carding Mill, with the Carding Machines, Horse Wheel and Slubbing Billy therein; and also Five several new Dwelling Houses....standing or adjoining to the Carding Mill.

N.B. All the Estates are Freehold, & very suitable for Cloth Manufacturers, having plenty of Room and Convenience, & being near to several Fulling and Scribbling Mills. Mr Robert Myers, of Bramley, (the Owner) will shew the Premises.

L.M.--Nov. 25, 1797.

170 Mill Bridge Mill at Liversedge near Birstall. To be sold by auction by W. H. Brazier upon the Premises on the 16th of January next. Household Furniture also Two Double Thirty Inch Carders, One Double Five Feet Carder, and Three Double Scribbling Engines, Two Billies, one Jenny, one Woolly, Stocks etc. L.I.—Jan. 14, 1799.

171 Wanted to Purchase. One Four Feet (Double) Wool Carding Machine, Two or three (Double) Wool Scribbling machines and Two or three Thirty Inch Wool Carding machines.

The machines must be strong and made upon the latest and most efficient Plan. Apply to T. Wright the Printer hereof.

L.I.—Jan. 28, 1799.

172 Farnley near Leeds. To be sold by Private Contract Two undivided Quarter Shares of and in all that newly erected Water Fulling and Scribbling Mill situate upon Farnley Beck, within the Township of Farnley, with a Steam Engine for throwing back the water upon the wheel when necessary—and also all the machinery of the said Mill consisting of Six Scribbling and Carding Machines, Six Billies, One Willie and 3 Pair of Stocks all in excellent condition.

L.I.—Mar. 4, 1799.

173 To Dyers. Wanted immediately a Green and Saxon Blue Dyer. As good wages will be given none need apply who are not perfect masters of their Business and can (if required) procure a satisfactory character. Apply to T. Wright, Printer of this Paper. L.I.—Mar. 11, 1709.

174 Cargoes to America. Merchants and Manufacturers desirous of making consignments of Woollen Cloths or Stuffs etc. are informed that a regular House established some years in one of the first commercial cities in America, part of the Firm residing in London (and which has regular Agents in Liverpool and the principal provincial ports) are willing to assume (for the usual Commission) the Management of any consignment made to them and pledge themselves to act with Fidelity, Punctuality and Dispatch in any transaction committed to their care.

The obvious Advantage in doing business in this way in preference to sending out an Agent or employing a single person in such a climate is too palpable for commentation; they are induced to use this public means of acquainting this neighbourhood from the idea that they are not a Commission House, it would not meet their convenience to undertake any business of this nature.

L.I.—Mar. 4, 1799.

175 A Horse Mill or Ginn. To be sold a Horse Mill or Ginn, with Shafts and Gearing for Four Horses and connecting wheels and Drum for working Six Machines. The whole esteemed to be constructed upon the best arrangement and in excellent Repair. Enquire of Printer hereof. L.I.—June 17, 1799.

176 To Young Men. Wanted a Number of Young Men, from Sixteen to Eighteen Years of Age, that would Engage for a Term

of Years to work in a Steam Engine Manufactory, where they may learn a valuable Business & meet with constant Employment, by applying to Messrs. Fenton Murray & Wood, Iron Founders & Engine-Manufacturers, Leeds.

L.M.—Aug. 3, 1799.

177 To Mule Spinners. Wanted one or two Mule Spinners in the Country. Any who can bring a good Character for honesty & Sobriety, being Master of the Business may apply to Mr Robt Cookson of Holbeck near Leeds.

Good wages will be given and Constant Employment, the Mules go by water and are 288 spindles each.

N.B. If a Family the more acceptable. L.M.—May 31, 1800.

178 Holbeck. To be sold by private Contract. Four Fulling Stocks, Two Drivers, One Woolley, Three Scribbling Machines, Three Carders, Three Billies with the Shafts, Drums, Straps and Machinery and about eighty new Cards belonging to the Mill at Holbeck nr Leeds now occupied by Messrs. John Sturges & Co. Apply John Wood on the Premises, or to Mr Richd Paley, Leeds. L.I.—March 23, 1801.

Mill Bridge near Birstall. Machinery. To be sold by Auction. A variety of Woollen Machinery, comprising one 3 ft. 4 ins. Single Scribbling Engine, three 4 ft. Double Scribbling Ditto, one 4 ft. Double Carder, and four 30 inch Carders. Also two Forty Spindle Billies, two Thirty Spindle Ditto, and two Jennies. Likewise a new Wolley with Top Rollers, built in the most substantial manner. Great part of the Machinery and Billies are nearly new and made by Mr John Jubb of Leeds.

L.I.—March 1, 1802.

Twist Double Warps on a Jenny; and also a Man to overlook a Picking Room. A Person from 40 to 50 Years of Age would be preferred for the latter Situation. Apply to Mess<sup>rs</sup> William Musgrave & Co, Simpson's Fold, Leeds.

N.B. Manufacturers of Fustians, Swandowns and Toilinets

regularly served with Warp of any Description.

L.M.—Jan. 14, 1804.

181 Hebble Mill, near Halifax. To be sold by Auction, in lots. By Order of the Assignees of Messrs. John & Samuel Lees, Bankrupts....at the House of Mr John Wright, the Old Cock Inn, in Halifax.

The Hebble Mill, in Wheatley near Halifax being three Stories high, containing three Rooms each 86 ft. long and 32 ft. wide, and three other Rooms, each 50 ft. long one of them 24 ft. wide and the other two 36 ft. wide each, with Drums for Machinery turned by a Water wheel, 24 ft. in diameter, and 6 ft. wide, and a Crank Steam Engine, Cylinder 42 ins. in Diameter, with two large Boilers. The Water wheel is supplied by the Hebble Brook and a spacious Dam, the Fall of Water 24 ft. A warehouse adjoining, 134 ft. by 24 ft. and 4 stories high with a Smith's Shop at the end

of it. A Dyehouse 210 ft. long and 18 ft. wide, and at the end of it a Building 2 stories high 20 ft. by 18 ft. A Wool Drying House 54 ft. by 21 ft. with Coal Sheds. A small House for Oil 9 ft. by 7. A Building 94 ft. by 21, 4 Stories high, part of it forming ten Cottages etc. The Water Wheel 18 ft. diameter with an upright Shaft and Drums supplied with Water by a Dam of about one Acre: the Fall of Water 21 ft.

To be sold by Auction in Lots (By order of the Assignees of Messrs. John and Samuel Lees, Bankrupts) at the Hebble Mill near Halifax. The following Machinery and Implements of Trade.

### WOOLLEN MACHINERY.

Five Double Scribbling Engines Six ft. wide with Cards of various qualities. One ditto five ft. wide. One ditto four ft. ten ins. Four Carding Engines five ft. One ditto four ft. six ins. Three Water Billies, one of 120, one of 88 and one of 80 Spindles. Four Hand Billies of 30 Spindles each. Thirteen 60 Spindle Jennies. Five 50 ditto. Three 48 ditto. Thirty six 40 ditto. Three Twining and Warping Mills, Winding Frames, Reels and Bobbins. One large Woolley or Teazer—Leather Straps and Geering complete. Three Fulling Stocks. One Raising or Brushing Gigg, with Geering complete. Three Broad Cloth Tenters, containing about ninety Yards each, in good Order. Two Frizing Engines with Geering complete.

Dyehouse Utensils.

Three Dying Vessels of Block Tin, one 4'-6'' by 5'-1'', one 3'-5'' by 3'-8'', one 2'-8'' by 2'-6''.

One Copper Vessel, 3'-6" by 3'-9". Five Leads, 4'-7" by 4'-3", 3'-10" by 4'-2", 4'-3" by 4'-3",

4'-4" by 4'-4", 3'-7" by 3'-7".

One Lead Vat, 5'-2" by 4'-10". Four Cast Iron Vats, 6' deep by 5'-8". Six Cast Iron Pans, 4'-6" by 4'-6", 4'-2" by 4'-6", 4'-5" by 5', 4'-8" by 5'-1", 4'-6" by 5'-11", 3'-7" by 4'.

A Brass Pan and a large Copper Crane or Syphon. Various other Utensils, Iron Trammels, Wool Nets, Winches,

Scrays, Jets, Rings, Nets &c.

Halifax, August 4, 1804.

L.I.—Aug. 13, 1804.

182 To be Sold by Auction. Cloth Dressing Utensils. In the Warehouse of Messrs. Child and Cordingley, Park Lane, Leeds. Several Pairs of Shears and Shear Boards, a Brushing Mill and Roller, a very Capital Screw Press and Jenny, large oven and Plates, several Dozen of Fencing and other Papers. Upwards of 6 Packs of Teazles together with Tables, Presses, Shelves and Sundries. L.I.—April 6, 1807.

183 To Oilmen, Drysalters & Others. To be sold by auction. All the extensive Stock in trade of Edward Oates—a Bankrupt. Large Quantities of Fish, Olive, Gallipoli, and other Oils. Several Parcels of Indigo, Madder, Cudbear, Woad, Foreign Woods and all other Ware and Commodities usually sold by Drysalters. The whole of the above articles are exempt from the Auction Duty, a serious consideration to purchasers.

L.I.—July 6, 1807.

Thursday morning last, five yds. and a half of the fore end of a Piece of Olive-Brown Pelissed Cloth in an unfinished state, of the value of 8s. 6d. per yd. in the White, and the Makers name John Burton, was feloniously cut & stolen from the Tenters of Mr Wm. Parker, situate in the Front of Park Row. Whoever can give Information of the Offender or Offenders, shall upon Conviction, receive a Reward of Ten Guineas from Mr Parker and a further Reward of Five Guineas at Mr Smiths office in Leeds.

L.I.—Nov. 23, 1807.

185 To Cloth-Dressers. To be Let. All those Dressing-Shops and Tenters situate in Cankerwell-Lane, Leeds. There is plenty of Water within the Shops, and the Premises may be entered upon Immediately. A Peacable Honest Man and a good workman, is

very likely to meet with Encouragement.

For other Particulars enquire of Mr Gray, on the Premises, who has to sell (or Let with the Shops) sundry valuable Dressing Tools, viz., a very good and large Iron Screw Press, with four Screws, a large Quantity of very good Press Papers, a Packing-Press, Sheers, Brushing-Mill &c.

L.M.—Sept. 30, 1809.

186 Carlton Lane, Woodhouse Lane. To be Lett and entered upon at May Day. A convenient Warehouse consisting of a Hot pressing Shop, Rowing Shop and Packing Shop on the ground floor. Taking-up Chamber, Balk Chamber (or would suit for a Blanket or Stuff Room) & Counting House on the first floor, with Cropping Chamber adapted for Six Boards and a spare Window for Burling or Drawing. Also from 100 to 200 yds. of Tenter Ground adjoining the Warehouse in a most airy situation and where Water has never yet been wanted in the greatest Drought. 1.1.—Mar. 21, 1808.

187 To be Sold by Auction. By Order of the Assignees of Kirk & Broughton, Bankrupts....

All the Utensils-in-Trade....comprising an Excellent Packing Press: an Iron Screw Press; Five Stang Presses; a large Quantity of Press Papers, greatest Part of them New; a Quantity of Shears; Shear-boards and Shearing Weights; Teazels; Making-up and other Tables; an Excellent Brushing-Mill; and every other

Article necessary in the Mercantile Business.

Also Fifty or Sixty Pieces of Cloth, Coatings, Flannels &c. L.M.—Jan. 5, 1811.

188 To be Sold by Auction. By Order of the Assignees of John Oddy, a Bankrupt, at Knostrop, or Thwaite Gate Mill, Hunslet, near Leeds.

<sup>1</sup> The old warehouse in Carlton Hill still exists and is used as a bedding factory. A boring near at hand has affected the water supply.

A Treble Scribbling Machine A Double Scribbling Machine Two Billeys of 36 Spindles each One Ditto of 34 Spindles each One Single Carder of 28 Inches Do. 29

Do. Do. Do. 30

A valuable New Teazer

Three Willeys. Three Reels

Drums, Shafts & Straps — Sundry Rollers Scales & Weights — Iron Plates Fuller's Earth — Old Cards

Three Iron Pans, with Grates, Doors & Frames Three Carts A Fulling-Stock and Tappet-Wheel

Together with a Variety of other Articles of Machinery.

L.M.—Dec. 7, 1811.

189 Woodhouse-Lane — To be Let. All those excellent Buildings lately erected, at a great Expence, by Mr Maximilian Fischer, standing near Woodhouse-Lane, in Leeds, consisting of a Warehouse, lately used for Pressing & Dressing-Shops, a Dwelling-House adjoining thereto, now occupied by James Lister, also Rowing, Cropping, Glossing, and Drawing Shops, Drying-House fifty yards in Length, Burling-Chamber, Four-Stand Stable, & Hay-Loft over the same, with Two good Pumps supplied by neverfailing Springs of water.

Also the Close of good Meadow or Pasture Land, wherein the Buildings stand, & another Close containing together 4 a., I r., 18 p., with Several Rows of Tenters, standg therein, each Row containing about Fifty Yards in Length. L.M.—Dec. 26, 1812.

#### ADDENDA.

190 Last Tuesday afternoon John Fish, beadle of this town, arrived here with William Bouchier Leonard, who was, with some difficulty, apprehended in London the Saturday before. On his examination, at the Rotation Office in this town, it appeared that he had procured plans of a scribbling-machine, a willy, and a scribbling-dick, which were found upon him; and in a box in his possession were also found, cast in brass, wheels for the greatest part of a scribbling machine, a one-handed shuttle, and several other utensils used in the woollen manufactory. By the depositions of several witnesses it also appeared that he intended to go to America, to set up a manufactory of wool, having endeavoured to inveigle them to go with him. In his defence he said, he was carrying them to Gloucestershire where he was born. On Wednesday he was committed to York Castle to take his trial....

L.M.—Feb. 24, 1784.

191 In Crowther's Bankruptcy. To be Sold by Auction. The Lease of a Frizing Mill, situate in a Place called Mill-Garth in Leeds, on the Rivulet called Shipscar-Beck, late in the Occupation ADDENDA 327

of John Crowther, the Bankrupt, with all the Machinery belonging the same and with which it is completely fitted up for the Purpose of Frizing Cloth.

L.M.—Nov. 10, 1792.

To Worsted, Woollen and Cotton Manufacturers. Wright & White,¹ of Lever-street, Manchester, have opened a Warehouse at the Far-Bank, Leeds, where they make Machinery for Spinning Worsted, upon a new and expeditious Plan, either by Hand or Water; also, for Scribbling, Carding, and Spinning Wool; likewise for Cotton of all Kinds.

Joiners and a Billy-maker wanted. L.M.—Nov. 24, 1792. 193 To be Sold by Auction. Sundry Dressing Utensils, belonging to Horner & Turner, near Burley Bar, Leeds, who intend in future to have their Cloth dressed out. Consisting of Several Pairs of Tenters, Five Stang Presses, with Plates, Papers &c. One Iron-Oven—Seven Shear Boards—Five Dubbing Boards—Twenty-nine Pairs of Shears; Sundry Lead Weights &c—Some Packs of Teazles; One Brushing Mill—A Quantity of Handles and Handle Racks.

L.M.—Dec. 15, 1792.

## POSTSCRIPT ON GIG-MILLS.

Professor Heaton has shown in a recent paper<sup>2</sup> that Gott actually made an early, but futile, attempt to use a gig-mill at Bean Ing. The circumstances are described in a letter, now in the Bradford Reference Library, written to Earl Fitzwilliam by John Beckett, 'a very active Magistrate at Leeds,' according to Earl Fitzwilliam's covering letter to the Home Secretary.<sup>3</sup> John Beckett was, of course, the founder of the Old Bank or Beckett's Bank, and he was created a baronet in 1813. The letter deals with the 'nocturnal meetings,' such as the attack at Beeston in 1799, which were a feature of the industrial troubles of 1799–1802, though Beckett had only trouble at Gott's factory to report, as follows:—

Leeds, 8 Augt 1801.

After making every possible enquiry....respecting these nocturnal meetings I think the subject does not furnish what is even of importance enough to justify me in troubling your Lordship with a letter upon it. They seem to languish and except some disastrous event should befall the Country I

hope may dye away.

Gott has been threatened very seriously—his windows all broken in the night, and though a man of pretty strong nerves he has thought it advisable to have an armed Guard about his house which I am sorry to say events have proved to be no more than a necessary precaution. This ill temper towards him arises from his having put up a Gig Mill in his Factory, which the Croppers consider as interfering with their particular employ, and they are considered as so desperate a crew that Gott has thought it necessary to take the Mill down again, which is a lamentable circumstance, the Croppers considering it as a victory.

John Beckett.

<sup>1</sup> They are named on pp. 21 and 209 as having supplied a Carder and Scribbler for Bean Ing.

<sup>2</sup> "Benjamin Gott and the Industrial Revolution in Yorkshire," Economic History Review, III, 1931, 45-66.

<sup>3</sup> The correspondence was published in "The Early Volunteers of Halifax," by T. W. Hanson, *Halifax Ant. Soc.*, 1920, pp. 110-116.

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